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EXERCISE DESERT ROCK LAS VEGAS NV
EXERCISE DESERT ROCK VI. ARMORED TASK FORCE, DETAILED PLAN OF T--ETC(U)
1955

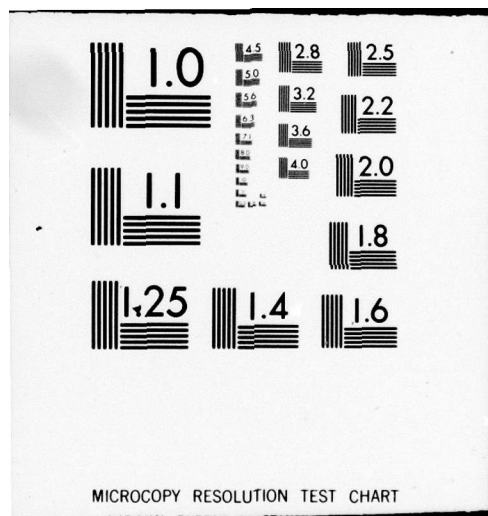
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ARMORED TASK FORCE, DESERT ROCK 6, DETAILED PLAN OF TEST,

PART 1 thru 7

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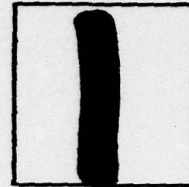
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HQ the Armored School, Ft. Knox, KY. Combat Dev Co
Armored Task Force Participation -
Exercise DESERT ROCK VI

DOCUMENT IDENTIFICATION

Detailed Plan of Test
March 1955

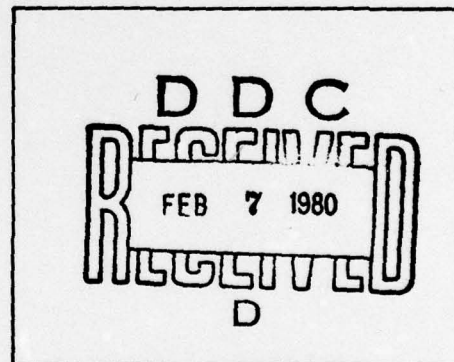
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ARMORED TASK FORCE DESERT ROCK VI

DETAILED PLAN OF TEST

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DETAILED PLAN OF TEST

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COMBAT DEVELOPMENTS GROUP
THE ARMORED SCHOOL
Fort Knox, Kentucky

DETAILED PLAN OF TEST

ARMORED TASK FORCE PARTICIPATION

EXERCISE DESERT ROCK VI

INTRODUCTION

1. References:

- a. Letter, ATARM (S), OCAFF, 27 November 1954, subject: "Troop Test, Armor Task Force During Exercise DESERT ROCK VI."
- b. Letter, ATNG-43 354/71 (S) (8 Dec 54), OCAFF, 8 December 1954, subject: "Directive for Exercise DESERT ROCK VI."
- c. Letter, AICBB-G 354.2, Headquarters, The Armored School, 7 January 1955, subject: "Moving Picture Coverage of Armored Participation in DESERT ROCK VI."
- d. Letter, AG No 10399, AMGCT-4 354.21 DR VI, Headquarters, Sixth Army, 30 December 1954, subject: "Directive for Exercise DESERT ROCK VI."
- e. Letter, ATARM 354 (S), Headquarters, CONARC, 3 February 1955, subject: "Troop Test, Armor Task Force During Exercise DESERT ROCK VI (U)."
- f. Letter, ATNG-TNG 354 (C), Headquarters, CONARC, 4 February 1955, subject: "Exercise DESERT ROCK VI (U)."
- g. Letter, AG No 1083, AMGBI-CI 354.2/DR VI, Headquarters, Sixth Army, 7 February 1955, subject: "Directives for Exercise DESERT ROCK VI."
- h. Letter, ATNG-D&R 354 (C), Headquarters, CONARC, 19 February 1955, subject: "Exercise DESERT ROCK VI - 4."

2. Objectives of the atomic portion of the Test of an Armored Task Force, DESERT ROCK VI, are stated in Inclosure 3 of the letter to which reference is made in paragraph 1b, above. These objectives were modified to state: "Field expedients developed or employed during the test should apply only to the terrain similar to that of the test site." This modification was authorized by the letter to which reference is made in paragraph 1e, above. Objectives of the chemical test are stated in the letter to which reference is made in paragraph 1e, above.

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3. This test will be conducted in conjunction with the shot which carries the AEC code name "Zucchini."

4. The operation includes the following phases:

- a. 9-13 March - Arrival and billeting of Fort Hood elements of the task force at Camp Irwin.
- b. 14 March-S-9 days- Training of the task force.
- c. S-8 to S-5 - Tactical march of the task force from Camp Irwin to the test site.
- d. S-4 to S-1 - Rehearsals, orientation and maintenance at the test site.
- e. S-Day - Shot day and atomic test.
- f. S/2 to S/5 - Tactical march of the task force from the test site to Camp Irwin.
- g. S/5 or S/6 - Chemical test of an armored task force.
- h. S/7 and S/8 - Maintenance and loading of equipment by Fort Hood elements of the task force.
- i. S/11 - Arrival of personnel at Fort Hood.

5. The task force will be constituted as follows:

a. From Camp Irwin, California.

723d Tank Battalion (minus one company) organized in accordance with Column 7, TO&E 17-25A.

b. From Fort Hood, Texas (4th Armored Division).

(1) Company C, 510th Armored Infantry Battalion, organized in accordance with Column 8, TO&E 7-17.

(2) Battery A, 22d Armored Field Artillery Battalion, organized in accordance with Column 8, TO&E 6-317.

(3) 1st Platoon, Company C, 24th Armored Engineer Battalion, organized in accordance with Column 8, TO&E 8-217.

(4) Provisional Aviation Company, organized in accordance with Annex A to letter referenced in paragraph 1h, above.

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(5) 1st Platoon, Company B, 510th Armored Infantry Battalion (less vehicles) to be transported by Provisional Aviation Company.

6. Moving picture and still photography coverage has been arranged. This coverage will include all phases of the operation as outlined in paragraph 4, above. Letter referenced in paragraph 1c, above, was the initiating correspondence for this coverage. It is anticipated that a training film will be developed from the actions covered during this operation. The training film would include all the phases of training and preparation incident to an armored task force action in atomic warfare. (See Inclosure - "Picture Plan Guide.")

7. News media coverage of this operation will be extensive since "Zucchini" will be an "open" shot. General Ridgway has emphasized the importance of this coverage in a letter to the Commanding General, Continental Army Command. A copy of this letter is attached as an inclosure to the letter referenced in paragraph 1f, above.

DISTRIBUTION:

Commanding General, CONARC (10 copies - 2 w/maps)
Commanding General, Fourth Army (5 copies - 1 w/maps)
Commanding General, Sixth Army (5 copies - less maps)
Commanding General, III Corps (2 copies - 1 w/maps)
Commanding General, Camp Irwin, California (2 copies - less maps)
Deputy Exercise Director, DESERT ROCK VI (3 copies - less maps)
Commanding General, 4th Armored Division (2 copies - less maps)
Commandant, C&GSC (3 copies - less maps)
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Commandant, The Artillery School (1 copy - less maps)
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UNCLASSIFIED TITLE
EXERCISE DESERT ROCK VI. ARMORED TASK FORCE, DETAILED PLAN OF TEST
ABSTRACT

(U) PARTIAL CONTENTS: (1) MOVEMENT OF TASK FORCE ELEMENTS - FT HOOD
EDULES AT CAMP IRWIN; (3) TACTICAL MARCH FROM CAMP IRWIN TO TEST SITE
LTEST; (7) MOVEMENT OF TASK FORCE ELEMENTS - CAMP IRWIN, CALIFORNIA

CALIFORNIA
TEXAS

INDEX TERMS ASS
TEST

ATOMIC TEST
FORCE ELEMENTS CAMP
FORT HOOD
PARTS 1

TERMS NOT FOUND ON
EXERCISE
FORCE
OPERATIONAL
TRAINING

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SK FORCE, DETAILED PLAN OF TEST. PARTS 1 THROUGH 7.

OF TASK FORCE ELEMENTS - FT HOOD, TEXAS TO CAMP IRWIN, CALIFORNIA. (2) TRAINING SCH
MARCHFROM CAMP IRWIN TO TEST SITE; (4) ATOMIC TEST; (5) OPERATION ORDER; (6) CHEMICA
LEMENTS - CAMP IRWIN, CALIFORNIA TO FORT HOOD, TEXAS; (8) OUTLINE OF REPORT.

INDEX TERMS ASSIGNED
TEST FACILITIES

TERMS NOT FOUND ON NLDB
EXERCISE DESERT ROCK
FORCE ELEMENTS FT HOOD
OPERATION ORDER
TRAINING SCHEDULES

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PICTURE PLAN GUIDE

TITLE: Armor at Desert Rock VI

1. Training Phase. 14 March, to S-9 days Camp Irwin, California.
Film coverage of troop training of the assembled reinforced tank battalion. A comprehensive record of the various phases of training the task force.
2. Overland March from Camp Irwin to Camp Desert Rock, S-8 to S-5 days.
Shots covering the unit moving across country. March formation, refueling and maintenance activities. Close-up shots of the various elements and types of vehicles comprising the task force. Aerial views if possible.
3. Preparation for Test S-4 to S-1 day.
Film coverage of troop orientation and rehearsals at Camp Desert Rock prior to shot.
4. S-Day.
 - a. Views of troops in assembly area.
 - b. Movement of task force into attack position.
 - c. Panoramic shots of dispersed task force.
 - d. Views from within tanks sighted toward ground zero and on flanking tanks to record blast and other visible effects of shot on equipment.
 - e. Action views of task force moving in the exploitation of the atomic shot. Shots taken from within moving tanks and vehicles together with panoramic views of maneuver.
 - f. Decontamination of equipment and other safety measures taken at conclusion of attack.
5. Return March, S/2 to S/ 6 days. Chemical Attack.
Action coverage of the reinforced tank battalion breaching a minefield and in a chemical attack to show following:
 - a. Protective equipment used by personnel.
 - b. Method of breaching minefield.
 - c. Formation and organization of task force in the attack:

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PART I

MOVEMENT OF TASK FORCE ELEMENTS

FORT HOOD, TEXAS TO CAMP IRWIN, CALIFORNIA

1. The task force elements listed in the introduction will be moved by rail and overland (aircraft) from Fort Hood, Texas to Camp Irwin, California. These elements will arrive at Camp Irwin prior to 14 March 1955.
2. The Commanding General, Fourth Army is responsible for issuing the necessary movement orders and secure the required transportation.
3. The Commanding General, Camp Irwin is responsible for preparing detraining instructions.
4. These task force elements will be billeted in space provided by the Commanding General, Camp Irwin.

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PRE-DESERT ROCK TRAINING SCHEDULE

11 March 1955 Hq Company

0700 - 0800 Security & Safeguarding Information
0800 - 0900 Phonetic Alphabet & Voice Radio Procedure
0900 - 1100 Operation of AN/GRC 7 & 8, Set 1 & Set 2

1200 - 1400 CBR Training
1400 - 1500 Field Expedients and Vehicular Recovery

11 March 1955 C Company & Attachments

0700 - 0900 CBR Training
0900 - 1000 Field Expedients and Vehicular Recovery
1000 - 1100 Security & Safeguarding Information

1200 - 1300 Phonetic Alphabet & Voice Radio Procedure
1300 - 1500 Operation on AN/GRC 7 & 8, Set 1 & Set 2

14 March 1955 Hq & C Companies

0715 - 0745 Bn Commander's Greeting
0745 - 1700 Commander's Time

14 March 1955 A & B Companies

0715 - 0745 Bn Commander's Greeting
0800 - 1100 Cross Country Driving
1200 - 1500 Platoon Formation
1500 - 1700 Maintenance

14 March 1955 Inf Company

0715 - 0745 Bn Commander's Greeting
0800 - 0900 Security & Safeguarding Information
0900 - 1100 CBR Training
1200 - 1300 Field Expedients
1300 - 1400 CO's Time
1400 - 1500 Phonetic Alphabet and Voice Procedure
1500 - 1700 AN/GRC 7 & 8, Set 1 & 2

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PRE-DESERT ROCK TRAINING SCHEDULE

14 March 1955 Arty Battery & Engineers

0715 - 0745 Bn Commander's Greeting
0800 - 0900 Phonetic Alphabet and Voice Procedure
0900 - 1100 AN/GRC 7 & 8, Set 1 & 2
1200 - 1300 CO's Time
1300 - 1400 Field Expedients
1400 - 1500 Security & Safeguarding Information
1500 - 1700 CBR Training

15 March 1955 Hq Company

0700 - 1400 Cross Country Driving
1400 - 1630 Maintenance

15 March 1955 A Company

0700 - 0800 Security & Safeguarding Information
0800 - 1000 CBR Training
1000 - 1100 Field Expedients
1200 - 1300 CO's Time
1300 - 1400 Phonetic Alphabet and Voice Procedure
1400 - 1600 AN/GRC 7 & 8, Set 1 & 2

15 March 1955 B Company

0700 - 0800 Phonetic Alphabet and Voice Procedure
0800 - 1000 AN/GRC 7 & 8, Set 1 & 2
1000 - 1100 CO's Time
1200 - 1300 Field Expedients
1300 - 1400 Security & Safeguarding Information
1400 - 1600 CBR Training

15 March 1955 C Company, Inf Co, Arty Bat, & Eng

0700 - 1000 Cross Country Driving
1000 - 1400 Platoon Formation Driving
1400 - 1630 Maintenance

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PRE-DESERT ROCK TRAINING SCHEDULE

16 March 1955 All Companies

0700 - 1000 Platoon Driving - Combat Formations
1000 - 1400 Company Formation Driving
1400 - 1600 Maintenance

17 March 1955 All Companies

0700 - 1100 Company Formation Driving
1200 - 1400 Reinforced Company in the Attack

18 March 1955 All Companies

0700 - 1100 Preparation for move to field
1200 - 1400 Tactical March to field
1400 - 1630 Maintenance

19 March 1955 All Companies

0700 - 0900 Tactical Movement to Attack Position
0900 - 1600 Reinforced Tank Bn in Attack
1600 - 1800 Maintenance

20 March 1955 All Companies

0700 - 1100 Reinforced Tank Bn in Attack
1200 - 1400 Tactical Move to Base Camp
1400 - 1630 Maintenance

21 March 1955 All Companies

0700 - 1700 Maintenance

22 March 1955 All Companies

0700 - 0900 Land Mine Warfare
0900 - 1700 Maintenance

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PRE-DESERT ROCK TRAINING SCHEDULE

23 March 1955 to S-8 days All Companies

0700-1100 Tactical Training and Preparation for Move to Desert Rock
1200-1600 Tactical Training and Preparation for Move to Desert Rock

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PART III

TACTICAL MARCH FROM CAMP IRWIN TO TEST SITE

1. During the tactical march of the task force from Camp Irwin to the test site casualties will be evacuated by helicopter to Camp Irwin or Camp Desert Rock.
 2. Engineer assistance for route improvement will be provided by engineers available at Camp Desert Rock. This engineer work will be accomplished prior to the movement of the task force. It will be coordinated with the Commanding Officer, 723d Tank Battalion, Camp Irwin, California.
 3. Radio communications during the tactical march will be restricted because of the limited frequencies available to the task force. These frequency restrictions are imposed by AEC at Camp Mercury, Nevada because of the large number of frequencies required by that commission in their test site.
 4. Final approval of the task force route is being secured. The task force tracked vehicles will use lumber mats to cross hard surface highways. These lumber mats will be carried by wheeled vehicles which will precede the task force to the crossing sites. Suitable road blocks will be established to caution civilian traffic during these crossing operations.
 5. Gasoline tank trucks will be furnished by the Quartermaster, Camp Irwin for POL support of the task force to the vicinity of Lathrop Wells. The S4, Camp Desert Rock will assume responsibility for POL support at Lathrop Wells and will continue this support during the test and the return trip to the vicinity of Death Valley Junction. The Quartermaster, Camp Irwin will assume responsibility for this POL support during the return of the task force from Death Valley Junction to Camp Irwin.
 6. Annex A is a reconnaissance of the Task Force Route from Camp Irwin to the test site. Maps for this route have been included as indicated in the distribution of the plan.
 7. The Scenario and Operation Order are included in Annex B. This annex presents the details of the tactical movement.
 8. Annex C describes the Air Force support which will be provided to the Task Force during the movement.
 9. Army air participation is described in Annex D. This annex includes the details of employment of the helicopter-borne infantry platoon.
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10. A series of tests will be conducted during this phase of the operation. Details of these tests are presented along with copies of forms to be completed in Annex E.

11. The arrangements for press coverage are presented in Annex F.

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PART III

ANNEX A

TACTICAL MARCH CAMP IRWIN TO TEST SITE AND RETURN

ROUTE RECONNAISSANCE

MAPS: 1:50,000, Sheets: SPECTER RANGE, 2757 II; CANE SPRING, 2757 I; and TIPPIPAG SPRING, 2758 I, Photo of strip map; Horizontal scale 1:250,000, vertical scale 1:125,000; Sheets: NI 11-2 TRONA, NF 11-11 DEATH VALLEY, NF 11-12, LAS VEGAS

1. MISSION.

- a. To perform route reconnaissance to atomic test site in vicinity of Camp Desert Rock, Nevada.
- b. To determine the location and amount of engineer work required on the route.
- c. To select suitable bivouac areas.

2. TERRAIN. The terrain between Camp Irwin and Camp Desert Rock is composed of eroded desert flats with intermittent mountains. Soil is rocky and sandy. Surface soil is generally firm, with the exception of dry washes and swamp areas in the Amargosa River bed. Visibility is not obstructed by terrain except in the passes and defiles. The Amargosa River flows from the vicinity of Death Valley Jct, south parallel to Highway 127, west thru Death Valley to the vicinity of Renoville and Saratoga Springs, then north thru Death Valley proper. This river is underground, however the water rises in December and generally remains above ground for approximately three months. The river bed will not carry any type vehicle. The California Mining Company road will safely carry tanks and other heavy equipment across this river.

3. ROUTES.

- a. Track vehicle route: (See maps for reference points.)
 - (1) From 723d Tk Bn motor pool to A terrain is generally level with a gentle up-grade starting at RJ East Range and Death Valley road. Route will follow to the right and parallel with the Barstow-Death Valley road, using the cement tank crossing at East Range-Death Valley RJ. Distance: 12.6 miles.
 - (2) From A to B is a well defined route over sandy rolling terrain with a series of defiles, two very narrow. Speed will be restricted through this area. A guide should be posted at the entrance to Cave Springs. Distance: 12.8 miles.

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- (3) From B to C is a gentle downhill slope through three defiles. Speed will be restricted through this area. Distance: 9 miles.
- (4) From C to D is a gentle sloping area. Distance: 2.8 miles.
- (5) The route from D to E will cross the Furnace Creek road. The California Mining Company road will be used to cross the Amargosa River. This road is narrow but well constructed. It is the only point, other than Highway 127, where tanks can cross the Amargosa River. Distance: 4 miles.
- (6) E to F is across a sandy gravel open area. Distance: 1.2 miles.
- (7) F to G, the California Mining Company road must be crossed. This terrain is sandy gravel with a few small gullies. Distance: 3.5 miles.
- (8) G to H is a rocky gully with several narrow points. Here a bulldozer will be required to clear the route and widen the narrow points. Distance: 2.4 miles.
- (9) H to I is over an old trail crossing the ridge line thence down a slope. Distance: 4 miles.
- (10) I to J is sandy gravel terrain. Distance: 3.2 miles.
- (11) J to K is open country and is sandy gravel terrain. Distance: 17.3 miles.
- (12) At K planking will be required to cross black top road running from Furnace Creek to Zebsrelki.
- (13) K to L is through Deadmans Pass and traffic should stay to the left of the blacktop road through the pass. After closing the pass the terrain is open to Point M. Distance: 30.5 miles.
- (14) At M planking will be required to cross Hwy 190. Distance: 28.2 miles.
- (15) M to N is low land but trafficable at this time. It runs parallel to Hwy 127 to Lathrop Wells. Distance: 28.2 miles.
- (16) At N planking will be required to cross Hwy 95.
- (17) N to O is level sandy terrain running parallel with and north of Hwy 95. Distance: 3.6 miles.
- (18) O to P is a wide dry wash which shows as a road on the map. Distance: 13.5 miles.
- (19) P to Q is a series of narrow defiles. Distance: 3.5 miles.
- (20) Q to R is very rough and rocky. A bulldozer will be required to widen and level this portion of the route. Distance: 2.1 miles.
- (21) R to S is through small defiles and rolling terrain. Distance: 4.7 miles.
- (22) At S bulldozer work will be required.

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(23) S to T is over rocky rolling terrain with several defiles.

(24) T is the Task Force assembly area.

b. Wheeled Vehicle Route:

- (1) Wheeled veh route will be the same as tanks from the motor pool to D.
- (2) From D to Salt Springs the terrain is level and sandy. The hard surface road is suitable for wheeled vehicles.
- (3) From Salt Springs to Kelley's Well wheeled vehicles will follow Hwy 127. This is a first class road with easy curves and low hills.
- (4) From Kelley's Well North to Lathrop Wells wheeled vehicles will follow Highway 29. This is a good first class highway.
- (5) From Lathrop Wells to Camp Desert Rock vehicles will follow Highway 95 to rear entrance of Camp Desert Rock.
- (6) Route then runs north from Camp Desert Rock on Mercury Highway to the old air strip.
- (7) Vehicles will turn left at old air strip to the bivouac area.

2 Incls

1. Maps
 2. Photograph of Map
-) Inclosed in envelope at back of plan.

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PART III

ANNEX B

TACTICAL MARCH FROM CAMP IRWIN TO TEST SITE

SCENARIO AND OPERATIONS ORDER

SCENARIO

1. MAPS: CALIFORNIA, 1:50,000; Sheets: Tieford Mountain 2659 I, Red Pass Lake 2754 IV, Avawartz Pass 2755 III. Photo of strip map, horizontal 1:250,000, vertical 1:125,000; Sheets: NI 11-2 Trona, NF 11-11 Death Valley, NF 11-12 Las Vegas. Nevada, 1:50,000; Sheets: Specter Range 2757 II, Cane Spring, 2757 I, Tippihah Spring 2758 II.

2. Background Situation.

Aggressor Army Group West invaded the U. S. in December 1954, following a devastating strategic atomic attack on major communication and industrial complexes. He established a beachhead in the San Francisco area and, in spite of heavy losses, has occupied central California and part of western Nevada. U. S. forces have employed atomic weapons strategically and tactically to halt the Aggressor advance. The front has been stabilized and preparations are under way for a counter-offensive.

Recent intelligence reports indicate that a major Aggressor buildup is taking place in the vicinity of Fresno, California. Intercepted Aggressor plans indicate that Aggressor Second Army has orders to encircle the U. S. forces now concentrated in southern California.

3. General Situation - Friendly. U. S. Sixth Army has moved its headquarters to Los Angeles, California where it is directing operations to contain the southern expansion of the Aggressor invasion and is preparing for the counter-offensive. U. S. III Corps, part of Sixth Army, with headquarters at Camp Irwin, California is defending a sector of the California-Nevada front west of Las Vegas.

4. General Situation - Enemy. Aggressor Second Army is responsible for the southern sector of the enemy front. Aggressor XI Corps, part of the Aggressor Second Army, opposes U. S. III Corps. Enemy activity in this area has been characterized by determined local attacks.

5. Special Situation - Friendly. The 201st Infantry Division, part of III Corps, is disposed along a line running from the Nevada border to a point due north of Las Vegas, Nevada. The 201st has been under concentrated attack for the past four days. The enemy attack has been contained

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after some rearward displacement. Friendly air reports that enemy forces have been observed moving from the vicinity of Fresno, California toward the Aggressor XX Corps front. To reinforce their front, III Corps has ordered the 1st Armored Division to move north to the vicinity of Camp Desert Rock where it is to be prepared for further employment to the north. The 1st Armored Division has designated the 723d Tank Battalion, less one company, to provide flank protection for the movement of the division to Camp Desert Rock. The 723d Tank Battalion has been reinforced with an armored infantry company, an artillery battery, a portion of the division aviation company, and an engineer platoon. That part of the 1st Armored Division order which is applicable to the 723d Tank Battalion has been extracted and is attached.

6. Special Situation - Enemy. The Aggressor 52d Rifle Division is opposing the U.S. 201st Infantry Division. Elements of this division now occupy commanding terrain in their sector and have an extensive road net which is being used for supply of front line elements. Prisoners captured in this area have revealed that a large armored force is concentrating behind the 52d Rifle Division. They state that this division has orders to attack south through the Amargosa River Valley.

7. Sequence of Events.

S-8. Task force departs Camp Irwin, California enroute to the north. The helicopter-borne infantry platoon will be employed to secure a crossing over the Amargosa River in the vicinity of Saratoga Spring. Other elements of the aviation company will be employed for observation and reconnaissance. Upon arrival at the approaches to the Amargosa River crossing the task force will encounter a mine field, which must be negotiated. The Task Force, after linkup with the helicopter-borne platoon, will continue movement to the vicinity of Ibex Pass. The Task Force will be ordered to secure the pass and be prepared to continue their mission to the north at first light.

S-7. The task force will continue their movement to the north at first light on S-7. During the course of their movement forward, they will encounter a situation which will require use of the engineer platoon, the aviation company and the air transported infantry platoon to secure, and repair a blown bridge (simulated) on the Furnace Creek Road near Greenwater Range. Tactical air will be utilized in support of this operation. The task force will link up with the helicopter borne infantry platoon, effect a crossing, and continue their mission to the north. Upon reaching Dead Mans Pass they will be ordered to secure it for the night and be prepared to continue their mission at first light on the following day.

S-6. The task force will continue its movement to the north at first light. Friendly air will report the highway bridges (simulated) at Amargosa, Death Valley Junction, damaged and defended by an enemy force.

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The task force will deploy. Supported by tactical air, the task force will attack, seize the bridges, and continue their advance to the north. The aviation company will air transport an infantry platoon to Lathrop Wells. The platoon will secure the vital road junction at Lathrop Wells and establish a road block to deny movement to the enemy elements withdrawing before the advancing task force. The task force will link up with the airborne infantry platoon, destroying or capturing the enemy force trapped between the two. The task force will then seize and hold critical points in the vicinity of The Calico Hills, as the main body closes into their forward assembly areas at Desert Rock.

S-5. The task force will close into assigned assembly area southwest of Mine Mountain and prepare for commitment to the north. Upon arrival at this area, the three companies of the tank battalion and the artillery battery will simulate four battalions for purposes of dispersion. Approximately 2,000 yards will separate the centers of the four company or battery areas. The purpose of this dispersion is to investigate communications or logistic problems which result from wide dispersion.

8. Control of the Exercise. Control of the exercise and interjection of enemy situations, to include simulated enemy air action against the task force will be provided by Headquarters TACTC, Camp Irwin. There will be no umpires with the unit. Control will be exercised by TACTC personnel based upon reports of action and progress by the task force commander.

9. Return of Task Force to Camp Irwin. The task force will return to Camp Irwin via the same route that it followed from Camp Irwin to the test site. It will have the same mission under similar circumstances. The employment of the aviation company and the helicopter-borne infantry platoon will be left to the discretion of the task force commander. The chemical test conducted during the return trip is presented in detail in Part VI.

~~CONFIDENTIAL~~

PART III

ANNEX B

INCLOSURE

TACTICAL MARCH FROM CAMP IRWIN TO TEST SITE

SCENARIO AND OPERATION ORDER

OPERATION ORDER

Copy Nr
Hq 1st Armd Div
Camp Irwin, Calif.
1700 ____ April 1955

OpnO 69

MAPS: California 1:50,000 Sheets: Tiefert Mountain 2659I; Red Pass Lake 2754IV; Avawatz Pass 2755II. Photo of strip map horizontal 1:250,000, vertical 1:125,000; Sheets: NI 11-2 Trona; NF 11-11 Death Valley; NF 11-12 Las Vegas, Nevada, 1:50,000; Sheets: Specter Range 2757 II; Cane Spring, 2757 I, Tippihah Spring 2758 II.

1. SITUATION

- a. Enemy forces: Aggressor 33d Tank Division moving from vicinity of Fresno, California toward Las Vegas, Nevada. Aggressor elements of battalion size are known to be operating behind our front lines. These elements have a few captured tanks and numerous antitank weapons.
- b. Friendly forces:
 - (1) SIXTH Army defends present line of contact and prepares for counter-offensive.
 - (a) III Corps - Army reserve.
 - (2) Tactical Air Force provides eight fighter-bombers for on-call missions to support the movement of this division.
- c. Attachments and Detachments.
 - (1) 723d Tk Bn (-One Co).
 - Atchd:
 - (a) C Co, 510th Armd Inf Bn.
 - (b) Btry A, 22d Armd Arty Bn.
 - (c) Div Avn Co (-).
 - (d) 1st Plat, Co C, 24th Armd Engr Bn.
 - (e) 1st Plat, Co B, 510th Armd Inf Bn (Air Transported).

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2. MISSION

This division moves via the Amargosa River Valley (Highways 127 and 29) to the vicinity of Camp Desert Rock, Nevada destroying all aggressor forces along this route.

3. EXECUTION

a. Concept of operation:

- (1) Maneuver - Division moves in column of CCS, CCA, CCB, CCC.
- (2) Fire Support.

* * * * *

(b) Air (Annex C).

* * * * *

- b. 723d Tk Bn (Reinf) - Provide flank protection to division during the movement. Route as indicated on attached maps.

4. ADMINISTRATION AND LOGISTICAL MATTERS - Admin O Nr 59.

5. COMMAND AND SIGNAL MATTERS - SOI and SSI.

~~CONFIDENTIAL~~

PART III

ANNEX C

TACTICAL MARCH FROM CAMP IRWIN TO TEST SITE

TACTICAL AIR PARTICIPATION

1. The Air Force will provide a forward air controller, which will accompany the task force during its movement from Camp Irwin, California to the test site, participation in the test, and return from the test site to Camp Irwin.
2. A minimum of eight fighter-bombers will provide "on-call" missions during the movement of the task force. Missions for these aircraft will not exceed two per day.
3. Column cover will be provided as follows:
 - a. When appropriate aircraft are flying in the vicinity of the task force, they will report to the task force forward air controller for possible ground support missions. A minimum of two reports per day of this type will be made.
 - b. When such cover is requested at least three hours in advance by the task force commander. Such requests will not exceed two per day. Time over the task force on each mission will be governed by aircraft fuel supply.
4. Air support missions will include:
 - a. Engagement of simulated aggressor air which is attacking the task force.
 - b. Close support of the helicopter-borne infantry during:
 - (1) The seizure of critical terrain.
 - (2) Flank protection missions.
 - (3) Delaying actions.
 - c. Participation in a coordinated attack of an aggressor fortified position.
 - d. Engagement of targets of opportunity which are designated by the task force commander.
5. Live ammunition will not be used.

CD 42-M-Army-Knox-Mar 55-40

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PART III

ANNEX D

TACTICAL MARCH FROM CAMP IRWIN TO TEST SITE

ARMY AIR PARTICIPATION

1. The provisional army aviation company will provide continuous observation while the task force is moving. It will also provide reconnaissance aircraft as directed by the task force commander.

2. During the movement to and return from the test site, an armored infantry platoon will be air transported by helicopter to test its capability to perform the following tasks:

a. Precede the task force to seize and hold critical terrain features as indicated on Inclosure (Overlay).

b. Provide flank protection on order of the task force commander when reconnaissance aircraft report enemy movement that might interfere with the mission of the task force. This will be done at least two times during the move to the test site.

c. Precede the task force to conduct a delaying action that will permit the task force to:

- (1) Engage the enemy from favorable terrain.
- (2) Outflank an enemy force.
- (3) Traverse a barrier such as a minefield.

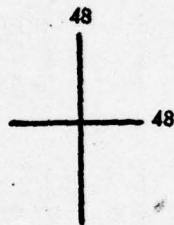
MAP SCALE: 1:50,000, CALIFORNIA,
Avawatz Pass,
Sheet 2755 III

Port III
Annex D
Inclosure

Tactical March from Camp Irwin
to Test Site

Army Air Participation

Overlay



CAUSEWAY
OVER
AMARGOSA
S-8



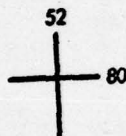
MAP SCALE: 1:50,000
CALIFORNIA, SHOSHONE,
SHEET: 2755 IV

Part III
Annex D
Inclosure

Tactical March from Camp Irwin
to Test Site

Army Air Participation

Overlay



Simulated
BLOWN BRIDGE
S-7 days



WHEELER MOUNTAIN ROAD.
GRID ZONE "F"

Annex D
Inclosure

Tactical March from Camp Irwin
to Test Site

Army Air Participation

Overlay

6600
1550



ROAD BLOCK, Lathrop Wells Rd
S-6 days

6800
1530

PART III

ANNEX E

MOVE FROM CAMP IRWIN TO TEST SITE AND RETURN

TESTS TO BE CONDUCTED

1. Motor March.

a. Operational Performance of Equipment. (See Inclosure 1, Daily Operational Log.) A chronological and statistical record of vehicle performance data to indicate the following items:

- (1) POL Consumption.
- (2) Parts mortality.
- (3) Operational miles and Engine hours.
- (4) Hours of 1st and 2d echelon maintenance performed.

b. Refueling Test. (See Inclosure 2, Refueling Data Sheet.) This test will establish the time required to refuel an armored task force utilizing fuel tank trucks. A record will be kept of the time required to refuel the individual type vehicle and the overall time for refueling the task force.

c. Fuel Consumption vs Driver Ability Test. (See Inclosure 3, Operator's Fuel Consumption Log.) This test will attempt to determine the relation of the individual driver's operating ability to the amount of fuel consumed by vehicle. Test will require ten (10) drivers and one time rotation between vehicles selected for this test. A record will be maintained of operating personnel and fuel consumed by test vehicle for comparative results.

d. Communications Test. Frequent operational checks will be made of task force radio nets to determine their ability to provide continuous communication under varying conditions of dispersion enforced by the threat of an atomic strike.

PART III

ANNEX C

INCLOSURE 1

DAILY OPERATIONAL LOG

Unit _____

Date _____

Vehicle:

Type _____

Vehicle Cmdr _____

USA Reg Nr _____

Driver _____

<u>Mileage</u>	<u>Main Engine Hours</u>	<u>Aux Engine Hours</u>	<u>Fuel Consumed</u>
End _____	Idle _____		Gals Added _____
Start _____	Operation _____		_____
TOTAL _____	TOTAL _____	TOTAL _____	TOTAL _____
<u>Engine Oil Consumed</u>	<u>Transmission Oil Consumed</u>	<u>Maintenance Performed</u>	
		1st Ech _____ mins	Air Cleaners Serviced
Quarts Added _____	Quarts Added _____	2d Ech _____ mins	Yes _____
			No _____

Parts Failures:Item FailedSNL GroupOrd Part NrREMARKSCrew Comments or Recommendations:

CD 41-M-Army-Knox-Mar 55-2M

ANNEX C

REFUELING DATA SHEET

Time Started: _____ Time Concluded: _____

Type Vehicle Fueled	Gals Pumped	Time to Fuel (Minutes)

CD 41-M-Army-Knox-Mar 55-75

ANNEX C

OPERATOR'S FUEL CONSUMPTION LOG

Date _____

Test Vehicle Nr _____

<u>Time</u>		<u>Mileage</u>		<u>Fuel Consumed</u>
Started _____	Refueling Halt _____	Odometer _____	Gals Added at time of refueling _____	
Refueled _____	Started _____	_____		
TOTAL TIME _____	TOTAL MILES _____	_____		

<u>Type Terrain Covered</u>	<u>Driving Conditions</u>
a. Highway Flat _____	Wet _____
Hilly _____	Dry _____
b. Cross Country Flat _____	
Hilly _____	

Note Vehicular Defects if any:

Remarks:

CD 41-M-Army-Knox-Mar 55-2C

PART III

ANNEX E

INCLOSURE 4

TACTICAL MARCH FROM CAMP IRWIN TO TEST SITE

TESTS TO BE CONDUCTED

HRU NR 1 TEST: "The Relationship Between Driver Practices and Gasoline Consumption"

Description of Test

This test will be conducted during the tactical march from Camp Irwin to the Desert Rock VI test site. It will involve the careful recording of gasoline used by M48 tanks during the motor march between the two points. Three different experimental conditions will be conducted as part of the test. These three conditions and the number and designation of vehicles which are participating are described in the following table:

Tank Companies

Experimental Condition	A Platoons			B Platoons			C Platoons		
	1	2	3	1	2	3	1	2	3
	(5 tanks in each platoon)								
Group 1: Drivers Rotated Among Vehicles	X			X			X		
Group 2: Drivers Not Ro- tated Among Ve- hicles	X			X			X		
Group 3: Special Train- ing in Gasoline Conservation	X			X			X		

Group 1 drivers will drive during the entire march, but will be rotated to other vehicles in their platoon at each halt when tanks are refueled. In other words, whenever there is a halt and the tanks are refueled before the march is continued, drivers will change vehicles. All crew members of the platoons comprising Group 3 will receive about an hour's instruction on approved gas-saving techniques, but it will not be necessary that they change to other vehicles at refueling halts. The platoon members in Group 2 will receive no special fuel conservation training or any special treatment during the march.

If it is found to be administratively possible, a procedure similar to that in the preceding table will be followed, using the quarter ton or two and one-half ton vehicles in the column.

A representative of HRU Nr 1 will be present during the exercise to help coordinate and supervise this test.

PART III

ANNEX E

INCLOSURE 5

TACTICAL MARCH FROM CAMP IRWIN TO TEST SITE

TESTS TO BE CONDUCTED

ORO TEST

PROPOSAL FOR ORO PARTICIPATION IN DRVI-4

1. ORO Personnel. Three analysts, one with each of three tank or armored infantry companies of the armor task force, to accompany the force from Camp Irwin, until completion of the test.

2. Data to be obtained.

a. Tank fuel consumption. Each analyst will obtain from one platoon in each company an accurate measurement of the fuel consumption within that platoon. Time to refuel, weather, terrain (cross country or road), idling times, amount of fuel, method of refueling, average speeds, and operation of the auxiliary generator will be recorded. Actual fuel consumption will be compared with several of the various current planning factors on fuel consumption to attempt to determine the best factor for future use.

b. Vehicle reliability. Each analyst will record armor vehicle breakdowns in each of the companies. Mileage initially and at breakdown, type of failure, cause of breakdown, weather, and terrain will be recorded. Data will be used with previously recorded data and with some still to be gathered to attempt to find an over-all pattern of vehicle failures which can be used in planning.

c. Attack through the burst area. The location of each unit of the task force will be plotted, with average distance between vehicles noted. Time to move through the area, rate of march, formation, and routes taken will be recorded, as well as periodic notations on unit locations. Items a, b, and c, will also be recorded. An attempt to analyze the effects of dispersion on control and tactical effectiveness will be made.

d. General information. Special indoctrination and training measures, SOP's, restrictions, and other precautionary measures will be noted.

PART III

ANNEX F

TACTICAL MARCH FROM CAMP IRWIN TO TEST SITE

PRESS COVERAGE PLAN

1. Representatives of selected news media will accompany the task force on the tactical march from Camp Irwin to the test site. These representatives will ride in selected positions in the task force vehicles. They will be positioned with platoon leaders, company commanders, and the battalion staff.

2. These representatives should arrive at Camp Irwin not later than 0800 hours on S-9 days. At 1000 on S-9 days they will attend an orientation presented by the Commanding General, Camp Irwin. The afternoon of S-9 will be devoted to drawing equipment and clothing. An opportunity will be provided for the representatives to "get acquainted" with the organization with which they will travel.

3. Messing facilities will be provided with the battalion staff for breakfast and supper. No special messing facilities will be provided for the noon meal.

4. No special sleeping facilities will be provided.

5. Arrangements for the transmission of copy to Camp Irwin, Camp Desert Rock, or Las Vegas will be provided.

6. If one of the representatives desires to leave the task force during the march, he will be returned to the task force on the return flight after delivery of copy to one of the points mentioned above. If he so desires, he may rejoin the task force in the test site area. Transportation of this type will be limited to the aircraft facilities required to transport copy of the other news media representatives.

7. Upon arrival at Lathrop Wells, news media representatives will leave the task force. They will be met by representatives of Sixth Army PIO, who will be responsible for their comfort until S-1 day.

8. The news media representatives will assemble at Camp Desert Rock on the morning of S-1 day to attend an orientation. Subsequently, on S-1 day they will rejoin the task force. These representatives will ride in the same vehicles in which they made the march to the test site.

9. If these representatives so desire, they may accompany the task force during the return trip to Camp Irwin.

~~CONFIDENTIAL~~

10. News media representatives desiring to observe the chemical test will be picked up at Camp Irwin and flown by helicopter to the site of the chemical test prior to the arrival of the task force. This arrangement will be limited to ten representatives because of the requirement for helicopter transport of the armored infantry platoon during the chemical test.

11. News media representatives who desire to accompany the task force during the entire operation will be selected in accordance with Public Information procedures. The number of these representatives should not exceed 24. The ten representatives to be flown from Camp Irwin to the chemical test site may be in addition to the 24 accompanying the task force.

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~~CONFIDENTIAL~~

10. News media representatives desiring to observe the chemical test will be picked up at Camp Irwin and flown by helicopter to the site of the chemical test prior to the arrival of the task force. This arrangement will be limited to ten representatives because of the requirement for helicopter transport of the armored infantry platoon during the chemical test.

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~~CONFIDENTIAL~~

PART IV

ATOMIC TEST

GENERAL

1. The objectives of the atomic test are presented in Inclosure 3 of Letter, ATNG-43 354/71 (S) (8 Dec 54), Office, Chief, Army Field Forces, 8 December 1954, subject: "Directive for Exercise DESERT ROCK VI."
 2. Annex A contains the details of administration and prior preparation required for the test.
 3. Annex B is the operation order for the attack, which forms the basis of the test.
 4. Annexes C and D present the details of Air Force and Army Aviation participation.
 5. Annex E includes the questionnaires and check list required to properly evaluate this test.
- _____

PART IV

ANNEX A

ATOMIC TEST

ADMINISTRATIVE INSTRUCTIONS

1. Vehicle engines will be warmed up between S-45 and S-30 minutes. All engines will be stopped by S-30 minutes and will not be started again until immediately after S-Hour.
2. Task force radios will be turned on and checked during the engine warm-up period specified in paragraph 1. All radios will be turned off at S-30 minutes and will not be turned on again until immediately after S-Hour. Use of radios immediately after S-Hour is essential to task force control.
3. Blank ammunition will be used during the atomic test. Five rounds per 90mm tank gun will be loaded in the tanks prior to movement from the assembly area. Blank caliber .30 and caliber .50 ammunition will also be used.
4. The task force will rehearse the entire test at least one time on S-4 days and again on S-3 days. This rehearsal will commence from the assembly area and will terminate upon seizure of the objective. (See Annex B, Operation Order, for movements and timing involved.)
5. Positioning of vehicles in the task force is based on distances prescribed in the OCAFF exercise directive. These distances have been checked and approved by the Radiological Section, Camp Desert Rock.
6. Radiological safety teams will ride in the vehicles of the task force. Disposition of these teams will be in accordance with the recommendations of the Radiological Section, Camp Desert Rock. Approximately twenty teams will be used to monitor radiation exposure of the task force.
7. Trenches, bunkers, dummies and colored smoke will be used to mark various locations in the test area. The details of this requirement were presented in letter, AICBB-G 354.2, Headquarters, The Armored School, 3 March 1955, subject: "Armored Task Force Participation, Exercise DESERT ROCK VI."
8. Detailed requirements for public address equipment, a terrain chart, a tape recorder, a podium and bleachers for observers were stated in the letter referenced in paragraph 7. These items are needed by the commentator on Mine Mountain. (See Inclosure 1 for details of this part of the plan.)

9. Camp Desert Rock will augment the task force ordnance support with four or five track vehicle mechanics. No parts support is available at Camp Desert Rock.

10. Shower facilities will be made available either at the decontamination station in the "forward area" or at Camp Desert Rock. Arrangements will be coordinated for this service upon arrival of the task force at the test site.

11. Troop laundry will be available at the test site. This service requires three days. The limit is fifteen pieces per man. There is no limit on the amount of cooks' whites that can be sent.

12. A request was forwarded to the Deputy Exercise Director, Camp Desert Rock, Nevada in letter, AICBB-G 354.2, Headquarters, The Armored School, 8 January 1955, subject: "Administrative Support Incident to Armored Task Force, Desert Rock VI." This request included:

- a. Office equipment and supplies required at Camp Desert Rock.
- b. Quarters and rations requirements.
- c. Army aircraft required for trips to Camp Irwin, California.
- d. Request for 800 pairs of goggles, if required.

PART IV

ANNEX A

INCLOSURE 1

ATOMIC TEST

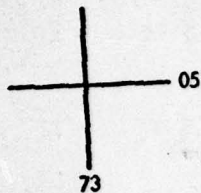
ADMINISTRATIVE INSTRUCTIONS

MINE MOUNTAIN OBSERVER PLAN

1. Distinguished military observers and selected representatives of news media will be positioned on top of Mine Mountain to observe the armored task force test.
2. These distinguished military observers will be selected by General Sladen, Deputy Exercise Director, Exercise DESERT ROCK VI. News media representatives will be selected in accordance with accepted Public Information procedures.
3. Separate buses will be provided to transport these observers to the top of Mine Mountain. They will be held in a position which is shaded from thermal radiation until after the shot. (See attached overlay for location of this position.)
4. Immediately after the shot, these observers will be moved to a vantage point on top of Mine Mountain to observe the armored task force test. (See attached overlay for approximate location of the bleachers.) They will be seated in bleachers where a commentator will describe the entire operation. The commentator will be provided with a public address system, a terrain chart, and a tape recorder.
5. The commentator will follow a prepared script insofar as possible. This script will be prepared in final form during the rehearsals on S-4 and S-3.
6. In addition to the public address system on top of Mine Mountain, speakers will be placed in the vicinity of the observer trenches. These speakers will relay the commentator's remarks to that area. Radio link will be provided to "News Knob" or such other location as AEC directs for orientation of personnel in that area. A similar radio link will be provided in a location specified by FCDA.

CD 42-M-Army-Knox-Mar 55-40

Map Scale 1:50,000
Tippipah Springs
Sheet 2758 II
Cone Springs
Sheet 2757 I

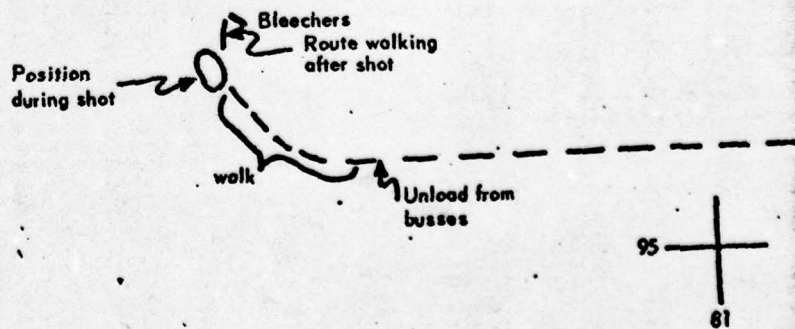


Part IV
Annex A
Inclosure 1

Atomic Attack

Administrative Instructions

Overlay



PART IV

ANNEX A

INCLOSURE 2

ATOMIC TEST

ADMINISTRATIVE INSTRUCTIONS

PRESS COVERAGE PLAN

(See PART III, ANNEX F.)

CD 42-M-Army-Knox-Mar 55-40

PART IV

ANNEX B

ATOMIC TEST

SCENARIO AND OPERATIONS ORDER

SCENARIO

1. MAPS: Nevada 1:50,000; sheets: Tippipah Spring, 2758 II, Cane Spring, 2757 I.
2. Background and General Situation.
(See Part III, Annex B.)
3. Special Situation - Friendly.

The 201st Infantry Division is disposed along the MTR shown on the Operations Order overlay. (Inclosure 1.) This position is swept by small arms and artillery fire from the high ground to the west and north. Friendly control of this high ground would force Aggressor to withdraw and would prevent his use of the road net to the north. Intelligence reports indicate that an enemy armored attack in this area is imminent.

CG III Corps has decided to execute a spoiling attack to disrupt the Aggressor armored attack. He has informed the CG, 1st Armored Division that his division will pass through the 201st Infantry Division and attack to the north. One atomic weapon has been allocated to 1st Armored Division for the attack. CG, 1st Armored Division has decided to attack in a column of combat commands, CCA leading. CCA has been ordered to make the penetration following the employment of the atomic weapon and to secure the flanks of the penetration.

The CO, CCA, 1st Armored Division has organized his combat command into three, tank heavy, task forces which have been assigned missions as follows:

4th Tank Battalion Task Force will seize the high ground to the east and protect the division right flank.

25th Tank Battalion Task Force will seize the Aggressor airfield and communications center at Groom Lake.

723d Tank Battalion Task Force will seize the high ground to the west to protect the division left flank. The 723d will be prepared to continue the attack to the north.

Resupply on their respective objectives has been arranged for the 25th and 723d Tank Battalion Task Forces.

That part of the 1st Armored Division Operations Order, applicable to the 723d Tank Battalion Task Force, has been extracted and is attached as Inclosure 1.

4. Special Situation - Enemy. (See Part III, Annex B.)

~~CONFIDENTIAL~~

5. Sequence of Events.

a. S-4. The task force will rehearse the entire operation. The rehearsal will commence with movement from the assembly area to the attack position and will include movement from the attack position to the static formation positions, the attack, occupation of the objective, and return to the vicinity of the observer trenches.

b. S-3. A complete dress rehearsal will be conducted. This rehearsal will include the commentary from Mine Mountain, television coverage of the operation, if provided, and checking of the radio link between the commentator position and the AEC and FCDA observer locations. The task force rehearsal will commence from the static position. (See overlay, part of Inclosure 1 for location, Inclosure 2 for formation.) The Air Force will be requested to participate in this rehearsal.

c. S-2. Maintenance and final preparations for the atomic test will be completed. The safety lecture will be presented by the Radiological Safety Officer, Camp Desert Rock.

d. S-1. In the morning task force elements will be moved from the assembly area to the attack position and thence to the static positions. Personnel of the task force will be taken on a conducted tour of the static display of equipment in the afternoon.

e. S-Day. Personnel of the task force will be alerted at S-1 hour. Vehicle engines will be started at S-45 minutes and will continue operating until S-30 minutes. Radio communications will be completely checked during this period. All personnel will be in vehicles or trenches at S-15 minutes.

At S-5 minutes vehicle commanders will check to insure that personnel are not looking through vision devices and will caution them not to do so until after the shock wave has passed over the vehicle. Immediately after the shock wave has passed vehicle engines will be started and radios will be operated. All stations will report into their respective nets. All vehicles will be prepared to move on order of the task force commander. The task force will move forward under the control of the task force commander. Movement will be regulated by radiological safety information received from the Rad-Safe teams and the density of dust in the area.

(For sequence of events and timing of Army Air participation, see ~~CONFIDENTIAL~~ Annex D.)

(For details of Tactical Air participation and Air Resupply, see ~~CONFIDENTIAL~~, Annex C.)

CD 42-M-Army-Knox-Mar 55-40

~~CONFIDENTIAL~~

PART IV

ANNEX B

INCLOSURE 1

ATOMIC TEST

SCENARIO AND OPERATIONS ORDER

OPERATIONS ORDER

Copy Nr
Hq 1st Armd Div
Camp Desert Rock, Nev.
0900 ____ April 1955

OpnO 70

MAPS: Nevada 1:50,000 sheets: Tippipah Spring 2758 II, Cane Spring 2757 I.

1. SITUATION

a. Enemy forces:

- (1) Situation: The Aggressor 52d Rifle Division occupies a fortified position as indicated on attached overlay.
- (2) Capabilities: Aggressor is capable of attacking astride Mercury Highway with the 52d Rifle Division and 33d Tank Division. He can continue defense of his present position with the forces presently in position and can reinforce this position with one reinforced tank regiment in two hours. Aggressor can withdraw to stronger positions to the north.
- (3) Indications: Location of the Armored Division and other intelligence reports indicate that Aggressor is preparing to attack to the south.

b. Friendly forces:

- (1) SIXTH Army has the mission of defending the present line of contact and preparing for a counter-offensive.
 - (a) III Corps - Army reserve and counter-offensive force.
- (2) Tactical Air Force provides column cover with eight fighter-bombers to support attack of this division.

c. Attachments and Detachments:

- (1) 723d Tank Bn (-1 Co).
Atchd: No change

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2. MISSION

This division will attack to seize the high ground to the north, prepared to exploit to the north and west.

3. EXECUTION

a. Concept of Operation:

- (1) Maneuver - Employment of an atomic weapon will be exploited to over-run Aggressor positions and secure division left flank. Division will attack north
- (2) Fire Support.

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(b) Air (Annex C).

(c) Atomic - 1st Armd Div has been allotted one atomic weapon for this attack.

- b. 723d Tk Bn (Reinf) - Exploit employment of atomic weapon. Penetrate and over-run Aggressor positions. Secure Division left flank. Upon seizure of objective be prepared for further operations to north and west.

4. ADMINISTRATION AND LOGISTICAL MATTERS - Admin O Nr 60

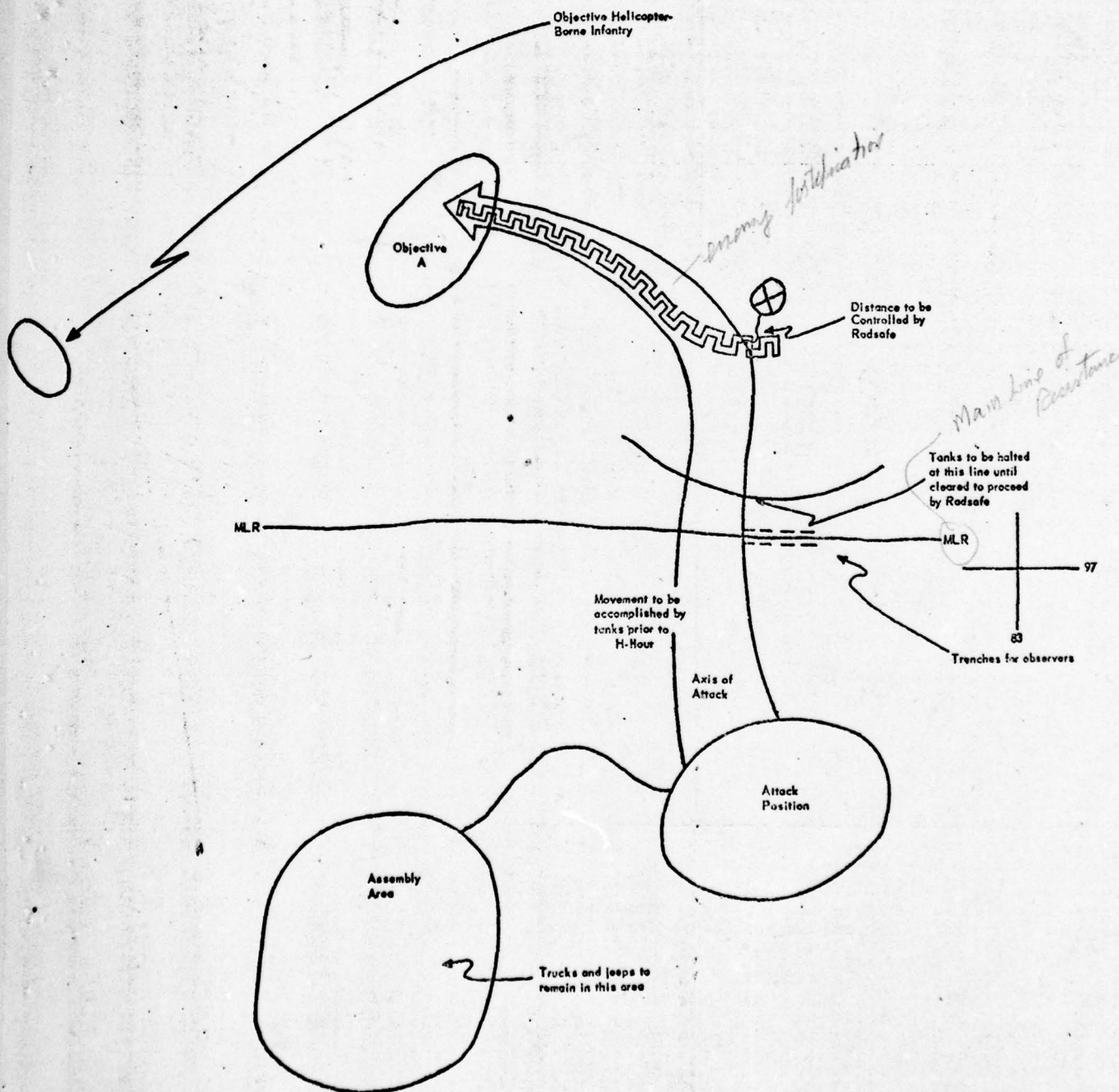
5. COMMAND AND SIGNAL MATTERS - SOI and SSI

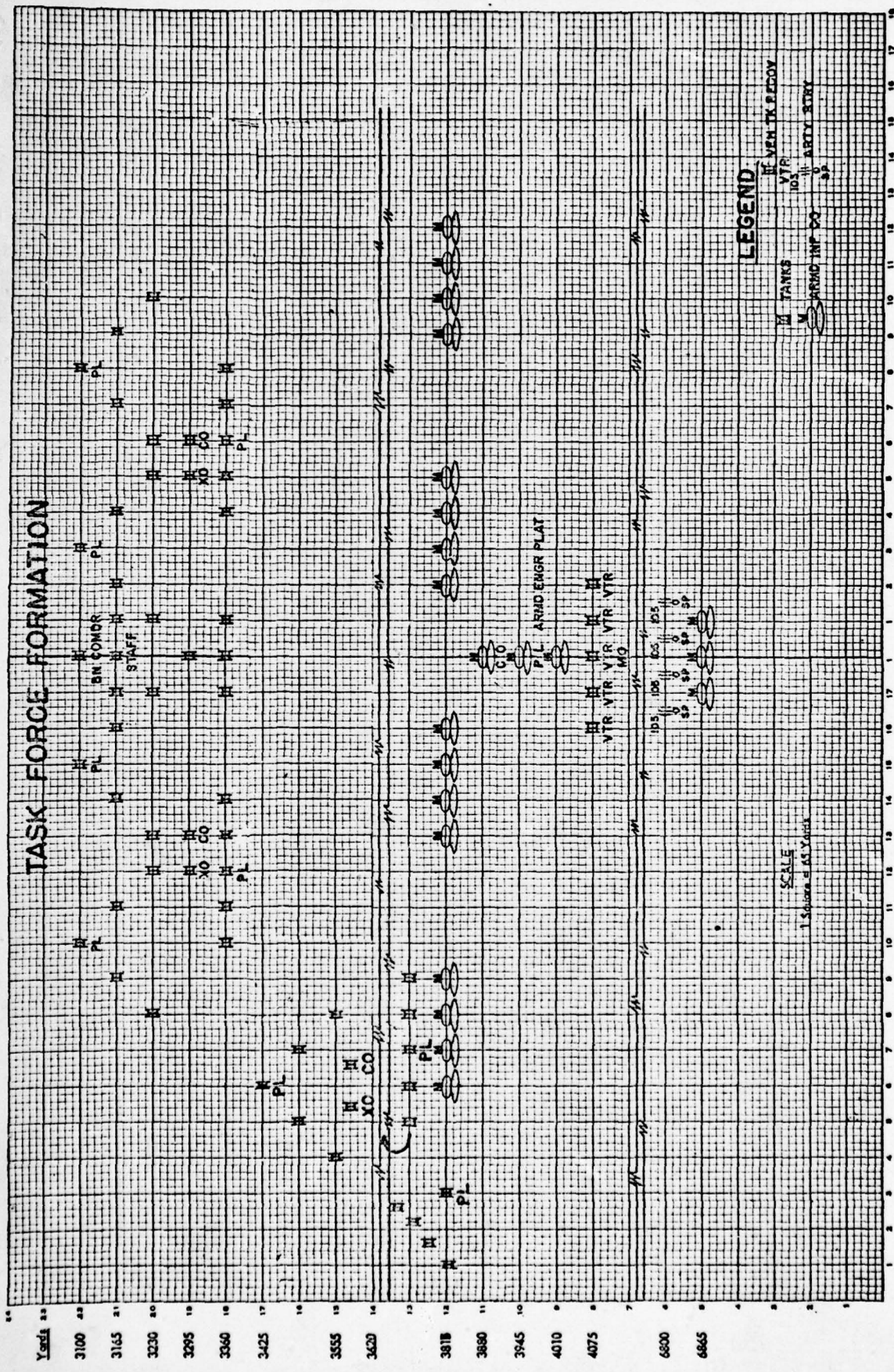
Map Scale 1:50,000
Tlapach Spring Sh 2758 II
Cone Spring Sh 2757 I



Part IV
Annex B
Inclosure 1

Atomic Test
Operations Order
Overlay





PART IV

ANNEX C

ATOMIC TEST

TACTICAL AIR SUPPORT

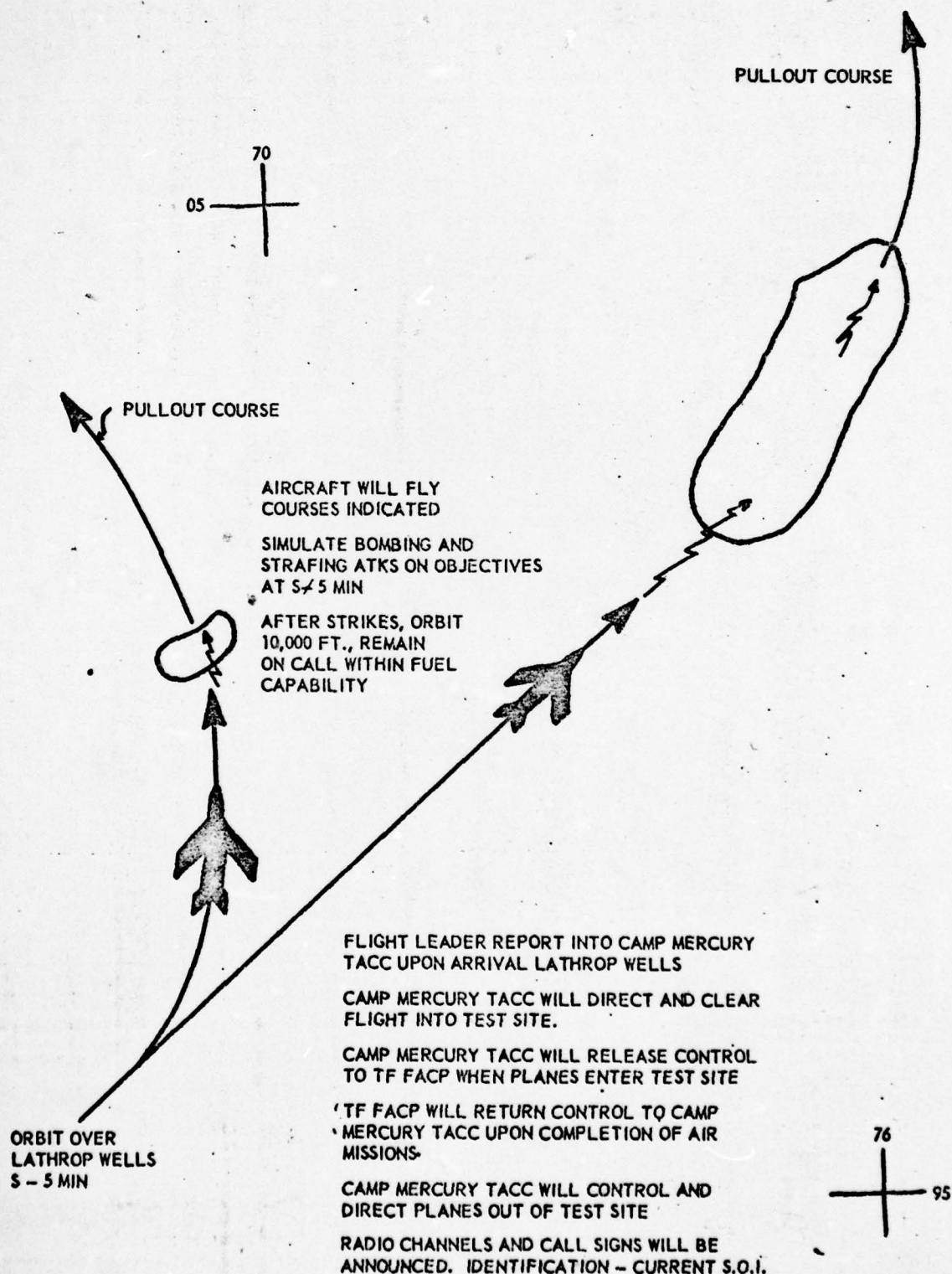
1. A minimum of eight fighter-bombers will provide tactical air support for the armored task force during the attack following the atomic burst. (See attached overlay.) This air support will be airborne in sufficient time to reach the test site by S+5 minutes.
2. The aircraft will remain in the area until released by the forward air controller or forced to return to their base for fuel. If forced to depart for fuel, they will be relieved by a similar number of aircraft within three minutes.
3. Tactical air will support the following ground operations:
 - a. Seizure by a helicopter-borne infantry platoon of a defile on a road leading to the objective area.
 - b. Over-running of enemy positions.
 - c. Final assault of the objective.
4. Live ammunition will not be used.

MAPS:
1:50,000 Nevada
SHEETS:
Tippah Spring 2758 II
Cane Springs 2757 I

PART IV
ANNEX C

ATOMIC TEST

TACTICAL AIR SUPPORT



PART IV

ANNEX D

ATOMIC TEST

ARMY AIR PARTICIPATION

1. During the atomic test the aviation company will be employed in the following manner:

a. Transport an armored infantry platoon forward of the objective to delay an enemy force that has been observed moving to reinforce the objective.

b. Evacuate simulated casualties from tanks which have been disabled by simulated enemy fire during the attack.

c. Resupply the task force once it has seized and secured the objective. Helicopters and fixed wing aircraft will be used during this resupply.

2. Operational details incident to this participation are presented in Inclosure 1.

3. Real estate and airspace requirements are indicated on the overlay which is attached as Inclosure 2.

PART IV

ANNEX D

INCLOSURE 1

ATOMIC TEST

ARMY AIR PARTICIPATION

OPERATIONAL DETAILS

1. H-19 and H-23 helicopters will be positioned in the helicopter assembly area as indicated in Inclosure 2 during the shot.

2. L-19 and L-20 fixed wing aircraft will be positioned at the airstrip indicated in Inclosure 2 during the shot.

3. At S/3 minutes, H-19 helicopters will commence airlifting an armored infantry platoon from the helicopter assembly area to Objective 1 as indicated in Inclosure 2. The route of these helicopters is indicated by red arrows in Inclosure 2. The armored infantry platoon will be unloaded at Objective 1 and the helicopters will return via the indicated route to the airstrip. They will arrive at the airstrip at approximately S/20 minutes.

4. At S/4 minutes, H-23 helicopters will move from the helicopter assembly area and will fly along the route indicated by green arrows in Inclosure 2. These helicopters will provide aerial observation and will furnish aerial evacuation of simulated casualties. Evacuation of personnel will be via the route indicated to the task force assembly area.

5. At S/10 minutes, L-19 aircraft will commence operations from the airstrip. They will provide aerial observation along the attack route and as directed by the task force commander, until such time as the task force objective has been seized. These aircraft will fly at an altitude greater than 500 feet above the surface and not more than 1,000 feet above the surface. Helicopter operations will be limited to a maximum altitude of 300 feet above the surface, thus crossing of the helicopter route will not endanger aircraft or personnel.

6. As the task force approaches its objective, all but one of the L-19s will return to the airstrip where they will prepare to furnish aerial resupply to the task force on its objective. One L-19 will remain in the vicinity of the objective to furnish observation and radio relay between the task force and the airstrip.

7. Upon order of the task force commander, the aerial resupply operation will commence. Fixed wing aircraft (L-19s and L-20s) and H-19 helicopters will operate from the airstrip to the task force objective following the route indicated by blue arrows in Inclosure 2. Altitudes previously mentioned will be maintained for this operation.

CD 42-M-Army-Knox-Mar 55-40

74 04

Objective No 1

Objective A

Task Force
Assembly Area

Part IV
Annex D
Inclusive 2
Atomic Test
Army Air Participation
Overlay

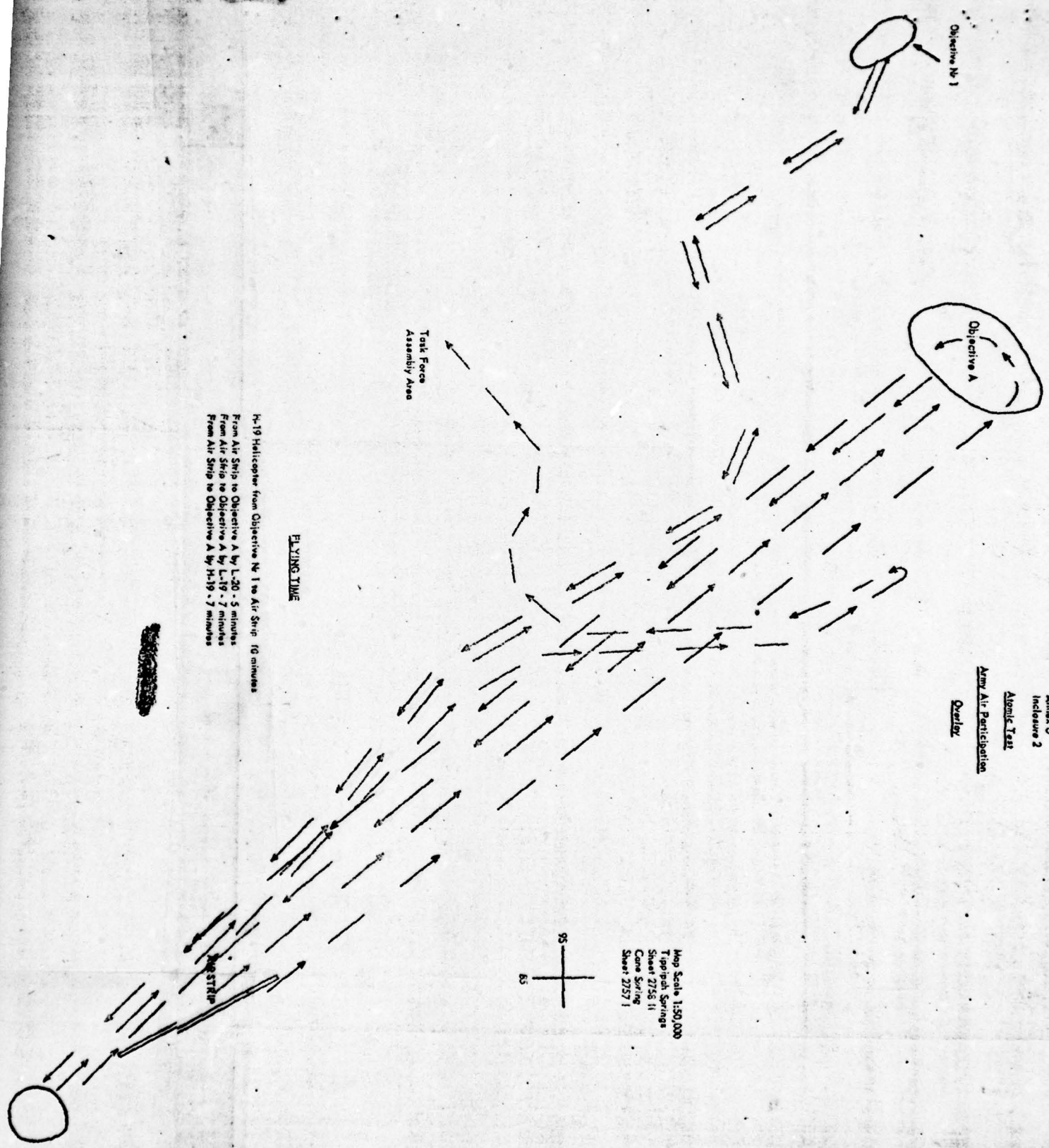
Map Scale 1:50,000
Topographic Springs
Sheet 2756 II
Cone Spring
Sheet 2757 I

95 65

FLYING TIME

H-19 Helicopter from Objective No 1 to Air Strip 16 minutes
From Air Strip to Objective A by L-20 - 5 minutes
From Air Strip to Objective A by L-19 - 7 minutes
From Air Strip to Objective A by H-19 - 7 minutes

H-19 Helicopter
Assembly Area
H-20 Helicopter



PART IV

ANNEX E

ATOMIC TEST

QUESTIONNAIRES AND CHECK LIST

1. Personnel Questionnaires. (See Inclosure 1.)

A survey to determine the reaction and impressions of the participating troops prior to and following the atomic shot.

2. Questionnaire for Command and Staff Personnel. (See Inclosure 2.)

A survey to determine changes in equipment, organization and doctrine resulting from this test.

3. Evaluator's Check List. (See Inclosure 3.)

A check list for evaluators.

PART IV

ANNEX E

INCLOSURE 1

ATOMIC TEST

QUESTIONNAIRE AND CHECK LIST

PERSONNEL QUESTIONNAIRE

NAME _____ RANK _____ ASN _____
ORGANIZATION _____

Position or Location at time of:

a. Burst

- | | | | |
|---------------------|-------|---------------|-------|
| (1) In Tank | _____ | (4) In trench | _____ |
| (2) In M59 AIV | _____ | (5) Other | _____ |
| (3) In M7B2 SP Arty | _____ | | |

b. Attack

- | | | | |
|----------------|-------|-------------|-------|
| (1) In tank | _____ | (3) In M7B2 | _____ |
| (2) In M59 AIV | _____ | (4) Other | _____ |

1. Prior to burst

a. Describe your feelings. Were you --

- | | |
|-------------|-------|
| (1) Tense | _____ |
| (2) Relaxed | _____ |
| (3) Afraid | _____ |

b. Do you feel that the orientation lecture prior to the test helped lessen your fear of the atomic burst?

Yes _____ No _____

Classified only when filled out

~~CONFIDENTIAL~~

c. What effect did you anticipate most?

- (1) Flash or bright light _____
- (2) Earth tremor _____
- (3) Increase in temperature _____
- (4) Strong wind _____

d. Were you confident your location afforded adequate protection?

Yes _____

No _____

2. At time of burst

a. What effect of the burst did you feel the most strongly?

- (1) Blast _____ (3) Earth tremor _____
- (2) Heat _____ (4) Other _____

b. What was your reaction to burst?

- (1) Surprise _____ (3) Fear _____
- (2) Relief _____ (4) Other _____

3. Following burst

a. How did you respond to the first orders issued by superiors following the shot?

- (1) Immediately _____
- (2) Slowly _____
- (3) Normal _____

b. Did the effect of the shot impair in any way the execution of your specific job:

Yes _____

No _____

c. If answer to above question was "yes", briefly describe condition and effect.

~~CONFIDENTIAL~~

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d. (1) Did you receive any safety instructions during the attack?

Yes _____ No _____

(2) From whom: Vehicle Comdr _____ CO Comdr _____
Plat Ldr _____ Other _____

e. If yes, how were these instructions received?

(1) Radio _____

(2) Personal contact _____

(3) Prearranged visual _____

f. Describe your feelings at conclusion of exercise.

(1) Exhilarated _____ (3) No change _____

(2) Weak _____ (4) Other _____

g. Now that you have participated in an actual atomic exercise, are you ---

(1) Afraid of an atomic attack _____

(2) Feel better prepared to meet such an attack _____

(3) No longer fear such an attack _____

(4) Other _____

h. What suggestions or recommendations can you offer that would assist in improving the orientation and preparation of troops to participate in future atomic tests?

CD 41-M-Army-Knox-Mar 55-7C

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PART IV

ANNEX E

INCLOSURE 2

ATOMIC TEST

QUESTIONNAIRE AND CHECK LIST

QUESTIONNAIRE FOR COMMAND AND STAFF PERSONNEL

Date _____

Unit: _____

Duty Asgmt: _____

To assist in the evaluation of test results your cooperation is requested in the filling out of the following questions. Where necessary, please answer in detail each question, giving specific facts and observations to qualify your answers. Any additional comments or recommendations you desire to make will be appreciated.

1. EQUIPMENT.

- a. What changes or modifications should be made in major items of T/O&E equipment based on the atomic test?

<u>Item</u>	<u>Recommended Change or Modification</u> (include reason for change or modification)
-------------	--

- b. What additional items of equipment are required to facilitate or improve:

(1) Command.

CONFIDENTIAL
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(2) Control.

(3) Communications.

(4) Decontamination.

(5) Radiological Safety.

(a) Detection devices.

(b) Where carried.

(c) Responsible agency for supply and maintenance.

2. ORGANIZATION.

a. What changes can be made in present organization to increase unit effectiveness in an atomic attack?

b. Is additional medical support required?

c. Is there a requirement for a special section within the T/F to correlate, interpret and disseminate Rad-Safe information? If so, what would be its composition and location?

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d. What elements of T/F could have been deleted? Explain why.

3. PERSONNEL.

a. What was the effect of the shot on the personnel of your command?

b. Was there a noticeable drop in efficiency? _____

An increase? _____ No change? _____

c. What was response to orders issued following shot?

Immediate _____ Delayed _____ No change _____

d. What special training should be given to personnel subject to the effect of atomic weapons?

4. OPERATIONS.

a. Did you have uninterrupted radio contact with subordinate and higher headquarters with the T/F?

b. Was Rad-Safe information received during the attack?

c. Was this information adequate?

d. Did transmission of Rad-Safe information by radio interfere with normal command traffic?

e. What effect did the shot have on controlling your command?

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- ~~CONFIDENTIAL~~
- f. What expedients can be devised to facilitate the passage of a T/F through a target area?
 - g. What obstacles interfered with command and control of units?
 - h. What actions can be taken to reduce to a minimum the time spent in the attack position?
 - i. What can be done to improve control of your unit?
 - j. What can be done to improve communications?
 - k. What did you gain by participating in this test?

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PART IV

ANNEX E

INCLOSURE 3

ATOMIC TEST

QUESTIONNAIRE AND CHECK LIST

EVALUATOR'S CHECK LIST

1. Movement to and Occupation of Attack Position

a. What methods of control were employed during movement to occupation of attack position?

b. What was the formation of task force in the attack position? (Indicate)

- (1) Distance between elements.
- (2) Distance between vehicles.
- (3) Distance and direction from GZ.
- (4) Location of control and command vehicles.
- (5) Location of elements within T/F.

c. Were all elements of T/F capable of communicating with each other by radio?

d. What communication and control difficulties were encountered?

e. Was wire communications employed? If so, where and between what elements?

f. How long did T/F remain in the attack position?

g. What instructions were issued to the subordinate commanders while in attack position?

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h. What actions took place during occupation of attack position?

i. What activities should have been performed prior to T/F occupying attack position?

j. Recommendations for reducing time spent by T/F in the attack position?

(1) Tasks performed.

(2) Modifications to equipment.

2. Movement and Occupation of Pre-shot Positions

a. How long did it take for the T/F to move from the attack position to the pre-shot position?

b. What was the distance covered?

c. What formation did the task force assume in the pre-shot position?

(1) Distance between major elements of T/F _____

(2) Distance between vehicles _____

(3) Distance and direction from GZ to _____

a. Arm'd Infantry positions _____

b. Tank elements _____

c. SP arty _____

d. Supporting troops _____

(4) Location of command vehicles in formation _____

d. What rad-safe equipment was furnished T/F? (Type, quantity, Nr rad-safe personnel)

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- ~~CONFIDENTIAL~~
- e. Where was the equipment located in the T/F?
 - f. What control measures were enforced in the pre-shot position?
 - g. Was a check of T/F radio nets made at this time?
 - h. Were any difficulties in control noted in the pre-shot position? (List)
 - i. What safety measures were enforced at this time?
 - j. What safety problems were noted?
 - k. Were vehicle engines running just prior to shot?
 - l. List advantages and disadvantages of movement into pre-shot position.
 - (1) Advantages
 - (2) Disadvantages

3. S-hour

- a. How soon after occupation of pre-shot position did T/F move to attack?

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- ~~CONFIDENTIAL~~
- b. What, if any, delay occurred in getting T/F in movement?
 - c. What effect did blast have on equipment in pre-shot position?
 - d. How was order to "ATTACK" transmitted?
 - (1) Radio _____
 - (2) Visual signal _____
 - (3) Prearranged time _____
 - (4) Other _____
 - e. Was any thermal effect noted?

4. Task Force in the Attack

- a. At what speed did T/F move in attack?
- b. What precautions were required in moving in the attack?
- c. How was rad-safe information transmitted?
- d. Did the transmission of rad-safe information interfere with the normal command traffic over the battalion and company command nets?
 - (1) Is a special net required?
 - (2) Will the Set # 2, RT-70 meet requirements for such a net?
- e. What effect did dust from the shot have on the movement of the T/F?
- f. Was the transmission of rad-safe information effective?

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~~CONFIDENTIAL~~

g. Was there any failure in controlling the movement of the T/F?

h. What was the closest element in the T/F to GZ?

(1) Distance _____

(2) Direction _____

(3) Time _____

i. What local restrictions prevented free movement of the T/F in the shot area?

j. What field expedients should be developed or employed to facilitate passage of blast areas?

k. What changes in the organization for combat of a reinforced T/F are necessary to better exploit an atomic attack?

(1) Equipment

(2) Troops

l. Was the T/F formation employed in the attack the most effective?

m. What changes in formation are recommended?

n. What was the total distance and overall time required to move T/F from the pre-shot position to the objective?

o. What adverse effects did the shot have on -

(1) Movement

(2) Control

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p. Did the T/F halt at anytime during the attack? If so why and duration of the halt?

q. Were all tanks and AIV's buttoned up during the attack?

r. How long was T/F in area of dust land?

5. Conclusion of Attack

a. What was the degree of contamination found present on T/F equipment?

(1) Tanks

(2) AIV's

(3) Wheeled vehicles

b. What were the areas of highest contamination on the vehicles checked?

Tanks

Suspension

Hull

Exterior

Turret Interior

Engine Compartment

AIV

Suspension

Exterior

Hull Interior

Engine Compartment

Wheeled Vehicle

Running Gear

Body

c. What methods were employed to decontaminate -

(1) Vehicles?

(2) Equipment?

(3) Personnel?

Classified only when completed

- ~~SECRET~~
- d. What was the time required to decontaminate -
- (1) The affected vehicles?
 - (2) The personnel?
- e. What degree of decontamination was present in the vehicle air cleaners?
- f. What can be done to improve and expedite the decontamination of -
- (1) Vehicles?
 - (2) Equipment?
 - (3) Personnel?
- g. How soon can crew perform maintenance services after passage thru contaminated areas?
- (1) 1st echelon services _____
 - (2) 2d echelon _____
- h. What action did the supporting artillery take during the exercise?
- i. What action did tactical air play in the exercise?
- j. What is the most effective use of supporting artillery and tactical air in the exploitation of an atomic shot?
- k. What is the best formation, speed and direction of attack in moving thru the target area of an atomic attack?

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1. What were the comments and recommendations of battalion command, staff, company commander and platoon leaders as concerns:

(1) Equipment

(2) Control

(3) Tactics

(4) Organization

CD 41-M-Army-Knox-Mar 55-75

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PART V

OPERATION ORDER - TEST SITE TO CAMP IRWIN

Copy Nr
Hq 1st Armd Div
Camp Desert Rock, Nev
1700 _____ April 1955

OpnO 71

MAPS: Nevada 1:50,000 sheets: Tippipah Spring 2758 II, Cane Spring 2757 I. . . . (See OpnO 69)

1. SITUATION

- a. Enemy forces: Aggressor parachute elements have occupied the eastern part of the Camp Irwin reservation. Several Aggressor units of battalion size are known to be operating behind our lines in the area of the Amargosa River.
- b. Friendly forces:
 - (1) SIXTH Army (See OpnO 69).
 - (2) _____ Tactical Air Force (See OpnO 69).
- c. Attachments and Detachments:
 - (1) 723d Tk Bn (-1 Co).Atchd: No change.

2. MISSION

This division moves via the Amargosa River Valley (Highway 29 and 127) to Camp Irwin, California. Destroys all Aggressor resistance on this route.

3. EXECUTION

- a. Concept of Operation:
 - (1) Maneuver - Division moves in column of CGs - CCA, CCB, CCC.
 - (2) Fire Support.No change.

*

*

*

*

* :

- b. 723d Tk Bn (Reinf) - Provides flank protection to division during movement. Route as indicated on attached maps.

4. ADMINISTRATION AND LOGISTICAL MATTERS - Admin O 61.

5. COMMAND AND SIGNAL MATTERS - SOI and SSI

CD 42-M-Army-Knox-Mar 55-40

PART VI

CHEMICAL TEST

1. The Chemical Section, CONARC, will provide a technical advisor to the project officer and the task force commander to insure proper conduct of the chemical test. This technical advisor will monitor the CBR training of the task force during the training phase at Camp Irwin. This officer should be available at Camp Irwin, California not later than S-12 days and should remain in that area until the chemical test has been completed and a report of the test is compiled.

2. Sixth Army will provide elements of a chemical service platoon which will assist in the chemical test. Personnel of this platoon will report to Camp Irwin not later than S-12 days. They will be charged with the filling and emplacing of chemical mines and performing other duties incident to this test. They will remain at Camp Irwin until the chemical test has been completed.

3. The Chemical Section, CONARC, has informed the Chemical Officer, Headquarters Sixth Army, of the logistical support incident to the chemical test. He will secure and ship chemical munitions, impregnating material, and Class "X" clothing to Camp Irwin.

4. M8 Collective Protectors have been installed in a portion of the tanks of the task force. Tanks equipped with this protector will be employed by the task force commander at the head of the column during the chemical test.

5. The use of chemical ammunition to support an attack by the task force as required by the original directive was deleted by Paragraph 2a of Letter, ATARM 354 (S), Headquarters, CONARC, 3 February 1955, subject: "Troop Test Armor Task Force During Exercise DESERT ROCK VI (U)." It was agreed that the firing of HE ammunition to simulate toxic concentrations would be deleted since it accomplishes no useful purpose and would unduly complicate the test.

6. Administrative instructions incident to this test are presented in Annex A. The location and size of the minefield is shown in the inclosure to Annex A.

7. The scenario and operation order are attached as Annex B.

8. Annexes C and D cover Air Force and Army air participation in this test. The personnel questionnaire and check list which will be used in evaluating this test are included in Annex E.

9. Annex F is the press coverage plan.

CD 42-M-Army-Knox-Mar 55-40

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PART VI

ANNEX A

CHEMICAL TEST

ADMINISTRATIVE INSTRUCTIONS

1. The task force will be directed to halt in the vicinity of Denning Spring (See Photo Map) which is just north of the reservation boundary. The task force commander will be informed of a special enemy situation as indicated in the scenario in Annex B. He will be informed that the enemy is employing chemicals and that he should take appropriate precautions. Tanks equipped with M8 protectors will be moved to the head of the column at this time.

2. After departure of the task force from Camp Irwin enroute to the test site, an integrated mine barrier will be emplaced astride the task force route in the vicinity of Cave Spring. (See Overlay for location and details of the barrier.)

3. Personnel of the task force will be equipped with Class "X" clothing which has been impregnated.

4. The task force will be directed into the prepared mine barrier where the following items will be observed and evaluated.

a. Reconnaissance and detection of the contents and limits of the barrier. Detection will include identification of the toxic agents with the M9A3 detector kit.

b. Reduction of, and passage through, the barrier. A lane will be marked through this barrier to facilitate passage of other troops. Minor decontamination of this area may be undertaken to facilitate crossings.

c. Institution of proper individual and collective protection measures.

d. Dismounted use of the M8 protectors.

e. Decontamination of personnel and equipment after passage of the contaminated area.

f. The requirement for 90mm chemical ammunition.

5. Emphasis will be placed on the following aspects of the chemical test:

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~~CONFIDENTIAL~~

- a. Crew test of the M8 Collective Protector.
 - b. Determination of the capability of an armored task force to breach and traverse a chemical barrier.
 - c. Delay incurred in the conduct of an attack when encountering chemical barriers.
 - d. The capability of a tank battalion to plan, execute, and exploit the effects of friendly toxic agents.
6. A portion of each tank crew in the leading elements of the task force will be dismounted to assist the engineer platoon in clearing the minefield. The purpose of this action is to test the individual cannisters provided with the M8 Collective Protector.

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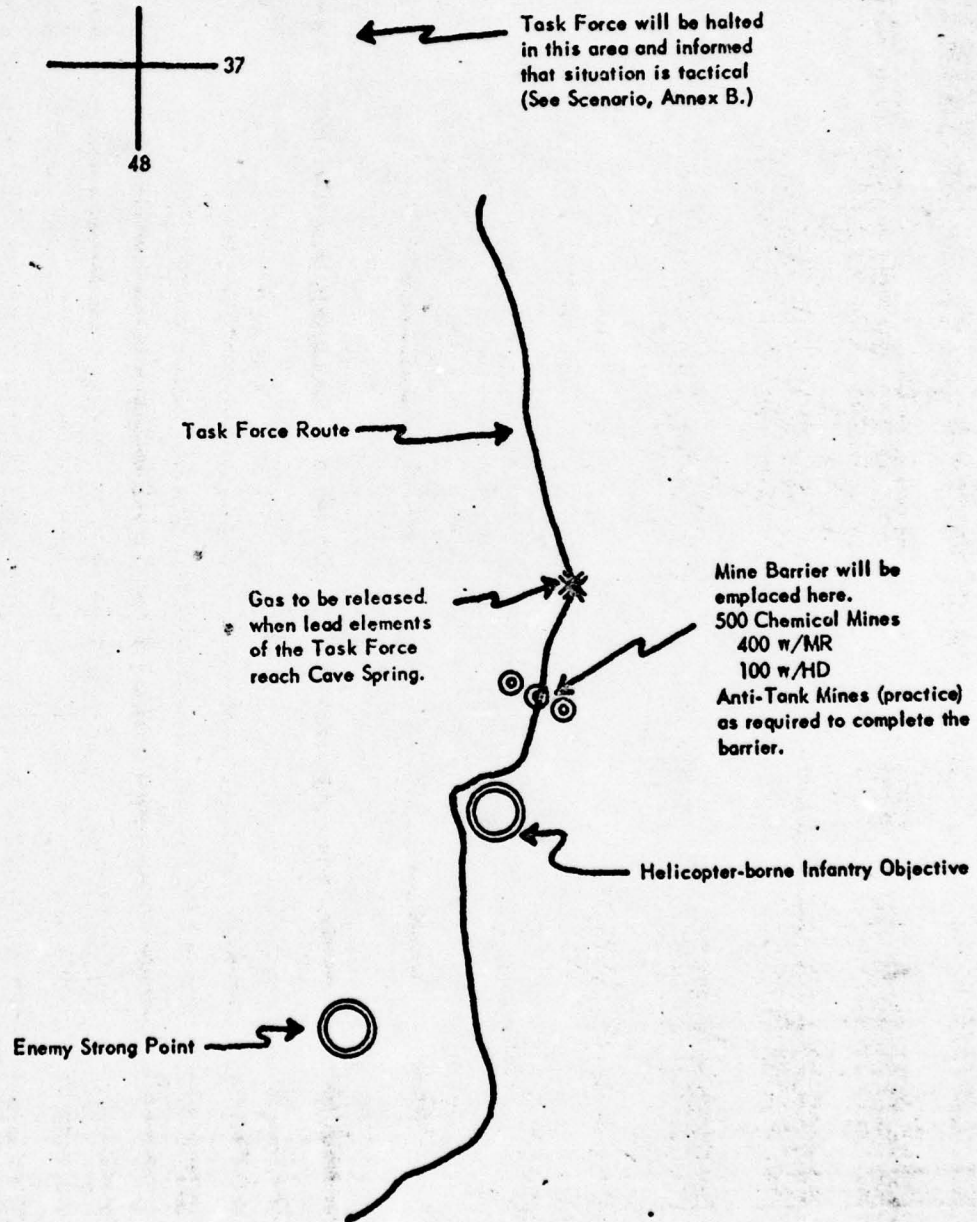
MAPS:
California, 1:50,000
SHEETS:
Awawatz Pass, 2755 III
Red Pass Lake, 2754 IV

Part VI
Annex A
Inclosure

Chemical Test

Administrative Instructions

Overlay



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a. Crew test of the M8 Collective Protector.

b. Determination of the capability of an armored task force to
breach and traverse a chemical barrier.

c. Delay incurred in the conduct of an attack when encountering
chemical barriers.

d. The capability of a tank battalion to plan, execute, and ex-
ploit the effects of friendly toxic agents.

6. A portion of each tank crew in the leading elements of the task
force will be dismounted to assist the engineer platoon in clearing the
minefield. The purpose of this action is to test the individual canis-
ters provided with the M8 Collective Protector.

M-Army-Knox-Mar 55-40

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PART VI

ANNEX B

CHEMICAL TEST

SCENARIO AND OPERATION ORDER

SCENARIO

1. MAP: 1:50,000 CALIFORNIA; Sheet: Avawatz Pass 2755 III.
2. Situation - General. See PART III, ANNEX B.
3. Special Situation. Following accomplishment of its mission in the vicinity of Camp Desert Rock, the 1st Armored Division was directed to return to the Camp Irwin area. The 723d Tank Battalion has been given the mission of providing flank protection to the main body of the division which is moving south along the Amargosa River Valley. An Aggressor parachute unit has been dropped in the vicinity of the Camp Irwin area and occupies the eastern portion of the reservation. This parachute unit is equipped with chemical munitions and has been employing these munitions to defend its airhead.
4. SEQUENCE OF EVENTS.
 - a. After the task force enters the confines of the Camp Irwin reservation, it will be routed to pass through a defile which is defended by a simulated enemy force. By-passing of the defile will not be permitted. The Task Force Commander will be advised in advance that the situation will become tactical when lead elements enter the reservation. He will also be informed that the enemy is using chemical weapons both defensively and offensively.
 - b. The Task Force Commander will make such dispositions as are required to facilitate tactical employment of his task force and minimize casualties resulting from chemical attack.
 - c. The Task Force will encounter a mine barrier which extends laterally throughout the defile and to a depth of at least 100 yards. The integrated minefields will be laid in accordance with TC 34, 1952 and FM 3-5.
 - d. Upon discovery of the contaminated area by lead elements of the task force, it is desirable that the commander make every effort to determine the nature and depth of the barrier with which he is confronted. At this point, the task force commander will have the alternative of:

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(1) Determining the advisability of by-passing the obstacle; (for safety reasons the lateral reconnaissance will be limited).

(2) Accepting casualties and overrunning the obstacle without making any effort to decontaminate or inactivate antitank mines.

(3) Clearance and marking of a lane through the barrier while taking adequate protective measures for personnel involved.

e. In order to occupy commanding terrain and permit breaching of the minefield, the task force commander must reduce defensive fires on the barrier. This will be accomplished by the use of artillery fired chemical agents.

f. The Task Force Commander will be required to compute the amount and type of chemical ammunition required to accomplish this task. Infantry, sent forward to occupy the objectives that have been neutralized by simulated chemical artillery fires, will be required to take adequate protective measures to prevent casualties in the objective area. Upon seizure of the commanding terrain and neutralization of defensive fires, a lane through the mine barrier will be cleared and properly marked.

g. The task force will then be permitted to proceed through the minefield.

h. Subsequently, an enemy strongpoint will be encountered which prevents continuation of the mission. The Task Force Commander will call on the artillery for chemical fire support and will be informed by the forward observer that the artillery battery supporting the task force has been attacked and destroyed by enemy air. The mortar platoon of the tank battalion has been attacked and destroyed also. Since no chemical ammunition is available in the tank elements of the task force, he will be forced to attack this strongpoint utilizing 90mm fires. This attack will be conducted utilizing normal armored task force tactics.

i. A careful comparison will be made between the time required to neutralize an objective utilizing chemical ammunition and the time required for the attack outlined in paragraph h, above.

j. Immediately after occupation of this objective, the task force commander will be informed that he has breached the major portion of the enemy defensive organization in that area. He will be required to utilize elements of the task force which have not been contaminated in the chemical test to proceed with his mission. The contaminated elements will be required to effect complete personnel and equipment decontamination prior to continuing in the task force.

PART VI

ANNEX B

INCLOSURE 1

CHEMICAL TEST

SCENARIO AND OPERATIONS ORDER

OPERATIONS ORDER

Copy Nr
Hq 1st Armd Div
Death Valley Jct., Calif.
0900 _____ April 1955

OpnO 72

MAPS: California 1:50,000 sheets: Avawarty Pass 2755 III, Red Pass Lake 2754 IV, Tiefert Mountains 2654 I.

1. SITUATION

a. Enemy forces:

- (1) Situation: An Aggressor parachute element (estimated to be a regiment) has been dropped in the vicinity of Camp Irwin. This force now occupies the eastern part of the Camp Irwin reservation. (See attached overlay.)
- (2) Capabilities: Aggressor is capable of attacking west to seize Camp Irwin. He can defend his present position using chemicals to support his defense. Aggressor can withdraw to the south to stronger positions.

b. Friendly forces:

- (1) SIXTH Army has the mission of defending the present line of control.
 - (a) III Corps - Army reserve.
- (2) _____ Tactical Air Force provides eight fighter-bombers for on-call missions.

c. Attachments and Detachments:

- (1) 723d Tank Battalion (-1 Co).
Atchd: No change.

* * * *

2. MISSION

This division reduces Aggressor resistance east of Camp Irwin.

3. EXECUTION

a. Concept of Operation:

- (1) Maneuver - Chemicals will be employed to reduce Aggressor resistance in the vicinity of Cave Spring and secure division right flank. Division attacks west to
- (2) Fire Support.
 - (a) Artillery - Chemical ammunition is available.
 - (b) Air (Annex C).
- b. 723d Tank Battalion (Reinf). Protect right flank. Secure high ground vicinity of Cave Spring (See Overlay). Continue on route to Camp Irwin.

4. ADMINISTRATION AND LOGISTICAL MATTERS - Admin O 61.

5. COMMAND AND SIGNAL MATTERS - SOI and SSI.

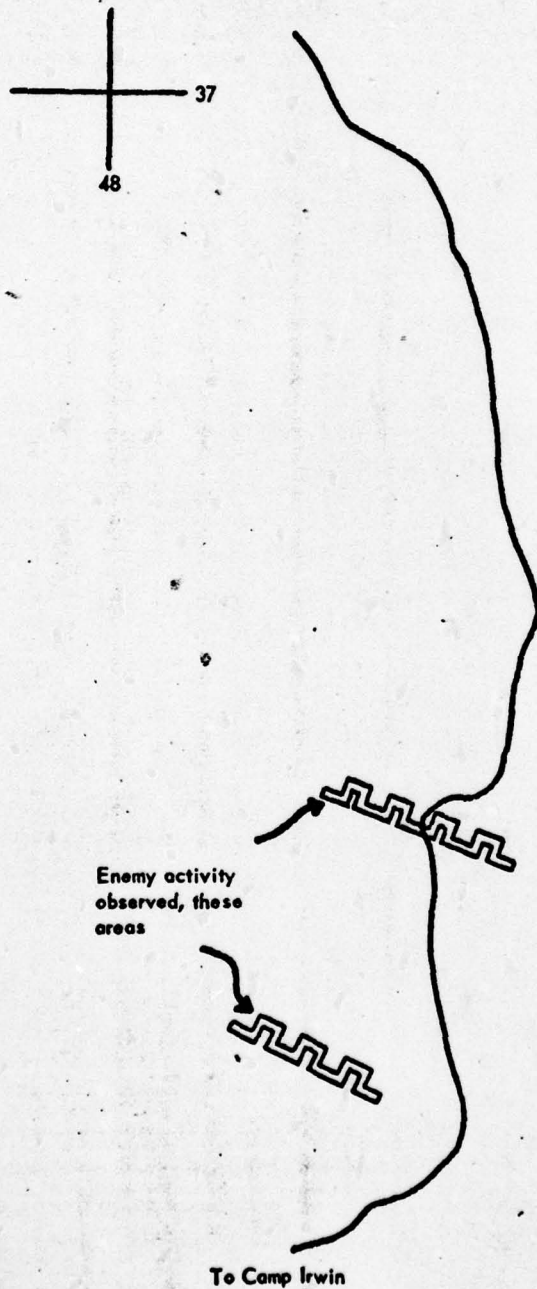
MAPS:
California 1:50,000
SHEETS:
Avawatz Pass, 2755 III
Red Pass Lake, 2754 IV

Part VI
Annex B
Inclosure

Chemical Test

Scenario and Operations Order

Overlay



Enemy activity
observed, these
areas

Reconnaissance limited to 300
yds right and left of route.

Route as indicated to be cleared

By-passing not authorized

To Camp Irwin

26

55

PART VI

ANNEX C

CHEMICAL TEST

TACTICAL AIR PARTICIPATION

See Part III, Annex C.

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PART VI
ANNEX D
CHEMICAL TEST
ARMY AIR PARTICIPATION

See Part III, Annex D.

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PART VI

ANNEX E

CHEMICAL TEST

QUESTIONNAIRE AND CHECK LIST

1. A questionnaire will be completed following the chemical test. This questionnaire and instructions for its completion are attached as Inclosure 1.

2. A check list for evaluators is attached as Inclosure 2. Evaluators will use this check list in observing the chemical test.

3. Both the questionnaire and the check list were prepared and approved by a representative of the Chemical Section, Continental Army Command.

PART VI

ANNEX E

INCLOSURE 1

CHEMICAL TEST

QUESTIONNAIRE AND CHECK LIST

QUESTIONNAIRE ON CHEMICAL TEST

INSTRUCTIONS: To be completed following the participation of the task force in the chemical test. This will be accomplished by assembling the personnel who participated directly in the test and presenting these questions to the group. The minimum requirements for this group are as follows: All tank crewmen who used the M8 Collective Protector will be included in this group. Platoon and squad leaders from the armored infantry and all platoon leaders and tank commanders of the tank battalions should participate in answering the following questions.

1. Did you find the M8 Collective Protector comfortable?
2. Did this protector provide a source of fresh air that would be advantageous although not in the presence of chemical agents?
3. Was any difficulty encountered in performing normal crew tasks within the tank while wearing the collective protector?
4. Was any difficulty encountered when leaving the tank and changing to the individual cannister?
5. Do you consider the collective protector a better mask than the M9A2?
6. Would you prefer to carry a spare M9A2 mask for use outside the tank or is the mask from the collective protector and the individual cannister completely satisfactory?
7. Did the fact that poisonous gas was present cause any concern on your part?
8. Did you tend to work more slowly and more carefully in the presence of this gas?
9. Did you decontaminate your tank?
 - a. If so, how long did it take?

- ~~CONFIDENTIAL~~
- b. What means was used to decontaminate the tank?
 - c. Do you feel that more decontamination equipment is required within the tank battalion?
 - d. Should each tank have decontamination equipment?
10. Do you believe that it is desirable to provide chemical ammunition for 90mm tank guns?
11. Were you satisfied with the chemical test sets provided to include:
- a. Paper.
 - b. Crayon.
 - c. Paint.
12. Should the tank crewman have a fresh filtered air source similar to the M8 Collective Protector for constant use?
13. Was there any failure of the collective protector equipment? If so, what was the failure and was it readily discovered and corrected?
14. Is the collective protector properly placed in the tank turret? If not, in what position do you recommend that it be placed?
15. Do you have any other comments relative to the test which you believe would be helpful in developing:
- a. Chemical protective equipment or clothing.
 - b. Reconnaissance procedures in the presence of toxic agents.
 - c. The use of chemical ammunition in offensive operations.
16. If you were required to repeat this exercise immediately, what changes would you make in your methods of accomplishing the chemical phase? (Task Force Commander only.)

PART VI

ANNEX E

INCLOSURE 2

CHEMICAL TEST

QUESTIONNAIRE AND CHECK LIST

CHECK LIST FOR OBSERVERS IN CHEMICAL PHASE, DESERT ROCK VI

1. Did the task force commander warn the unit that CBR warfare was imminent? Yes ☐ No ☐

REMARKS:

2. Were proper alarm measures used? Yes ☐ No ☐

REMARKS:

3. Was the task force disposed in such a manner as to minimize casualties during reconnaissance and breaching operations?

REMARKS: Yes ☐ No ☐

4. Did the unit take full advantage of CBR protective measures upon recognition of the gassed area? Yes ☐ No ☐

REMARKS:

5. Was protection extended over the entire column? Yes ☐ No ☐

REMARKS:

6. Was protective equipment used where not needed? Yes ___ No ___

REMARKS:

7. Did designated personnel make proper use of detection equipment?

a. Detector paper.

Adequately ___ Poorly ___ Not at all ___

REMARKS:

b. Detector crayon.

Adequately ___ Poorly ___ Not at all ___

REMARKS:

c. M9A2 Detector Kit.

Adequately ___ Poorly ___ Not at all ___

REMARKS:

8. Did breaching personnel use protective equipment properly?

Adequately ___ Poorly ___ Not at all ___

REMARKS:

9. Was a path through the barrier decontaminated? Yes ___ No ___

REMARKS:

10. Did the task force elements traverse the barrier rapidly and with confidence? Yes ☐ No ☐

REMARKS:

11. Was the lane through the barrier properly marked and posted?

REMARKS:

Yes ☐ No ☐

12. At what point were vehicles and personnel decontaminated?

REMARKS:

13. In your opinion, was the choice in 12, above, satisfactory?

REMARKS:

Yes ☐ No ☐

14. Did the assault elements return fires placed on the barrier area or was this mission given to support elements?

REMARKS:

15. Did the task force commander properly analyze the situation requiring friendly toxic fires?

Well ☐

Poorly ☐

Not at all ☐

REMARKS:

16. Did the task force take proper measures to effect personnel and equipment decontamination after crossing the barrier?

REMARKS:

Yes ☐ No ☐

PART IV

ANNEX F

ATOMIC TEST

PRESS COVERAGE PLAN

(See Part III, Annex F)

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PART VII

MOVEMENT OF TASK FORCE ELEMENTS

CAMP IRWIN, CALIFORNIA TO FORT HOOD, TEXAS

1. Task force elements returning to Fort Hood, Texas will depart Camp Irwin, California on or about shot day plus nine days.
2. The Commanding General, Fourth Army is responsible for issuing the necessary movement orders.
3. The Commanding General, Camp Irwin is responsible for securing the required transportation in coordination with the Commanding General, Fourth Army.
4. The Commanding General, Camp Irwin is responsible for preparing entraining instructions.
5. These task force elements will be detrained at Fort Hood in accordance with instructions issued by the Commanding General, Fort Hood.

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EXERCISE DESERT ROCK LAS VEGAS NV
EXERCISE DESERT ROCK VI. ARMORED TASK FORCE, DETAILED PLAN OF T--ETC(U)
1955

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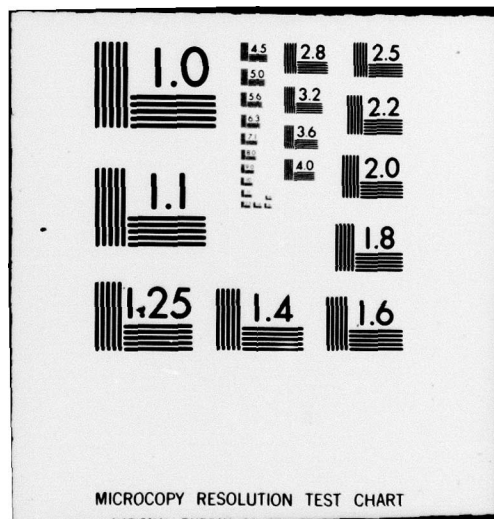
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DATE
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PART VIII
OUTLINE OF REPORT

I. GENERAL

A. Purpose

B. Objectives

1. Atomic Test
2. Army Aviation Participation
3. Chemical Test

C. Responsibility for preparation

1. Atomic Test - The Armored School
2. Army Aviation Participation - Aviation Section
Continental Army Command
3. Chemical Test - Chemical Section, Continental Army Command
4. Overland Movement - The Armored School

II. ATOMIC TEST

A. Operations

1. Scheme of Maneuver

- (a) Troops
- (b) Attack Situation Overlay
- (c) Control Plan

2. Operations

- (a) Orientation and Rehearsal
- (b) Movement and Occupation of Attack Position
- (c) Occupation of Pre-Shot Position
- (d) S-Hour

(e) Attack

- (1) Troop reaction
- (2) Control problems
- (3) Vehicular operation
- (4) Tactics
- (5) Field expedients

(f) Conclusions

B. Planning and Operational Problems

1. Restrictions

- (a) ABC & Army Limitations
- (b) Equipment and Personnel
- (c) Funding

2. Procedure Problems

C. Lessons Learned

1. Tactical

- (a) Command and Control
- (b) Formations and Speed
- (c) Safety
- (d) Supporting Elements
 - (1) Tactical Air
 - (2) Artillery
 - (3) Engineer

2. Organizational

- (a) Combat
- (b) Logistical

3. Equipment

- (a) Automotive
- (b) Communications
- (c) Changes and Modifications

4. Personnel

III. SPECIAL TESTS

A. Army Aviation Test

Annex - Test Report

B. Chemical Test

Annex - Test Report

C. Overland March of Armored Task Force

Annex - Statistical Data

IV. CONCLUSIONS AND RECOMMENDATIONS

A. Atomic Test

B. Army Aviation Test

C. Chemical Test

D. March Performance